

THE CO-OPERATIVE  
WHOLESALE SOCIETIES  
LIMITED

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ANNUAL 1888













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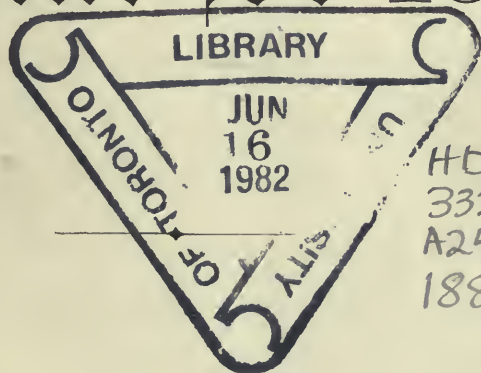


THE  
CO-OPERATIVE WHOLESALE SOCIETIES

LIMITED.

—◆—  
ENGLAND AND SCOTLAND.  
—◆—

Annual for 1888.



PUBLISHED BY  
THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,  
1, BALLOON STREET, MANCHESTER;  
AND  
THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED,  
119, PAISLEY ROAD, GLASGOW.

MANCHESTER:  
PRINTED AND BOUND BY  
THE CO-OPERATIVE PRINTING SOCIETY,  
AT THEIR WORKS,  
NEW MOUNT STREET, ANGEL STREET.



## P R E F A C E .

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IT is our pleasing duty to submit to you our "Annual" for 1888, which will be found to contain much very useful and interesting matter.

The statistics embodied therein picture the development and progress of the two Wholesales, which, on the whole, may be looked upon as very gratifying, whilst there is still before us an extensive field for further effort.

The various topics discussed in the several articles will, we think, be very serviceable to our members in diffusing knowledge on questions affecting the wellbeing, advancement, and health of the community.

It would be invidious to select any of the contributions for special mention, but we trust the subjects will commend themselves as being seasonable and opportune in the present condition of affairs.

As stated in our previous issues, we do not in any wise hold ourselves responsible for the views enunciated by the writers of the articles; they have been free to express their own opinions and put forward the information and data to assist in the better understanding of the question under review.

THE COMMITTEE.



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THE  
**Co-operative Wholesale Society**  
LIMITED.

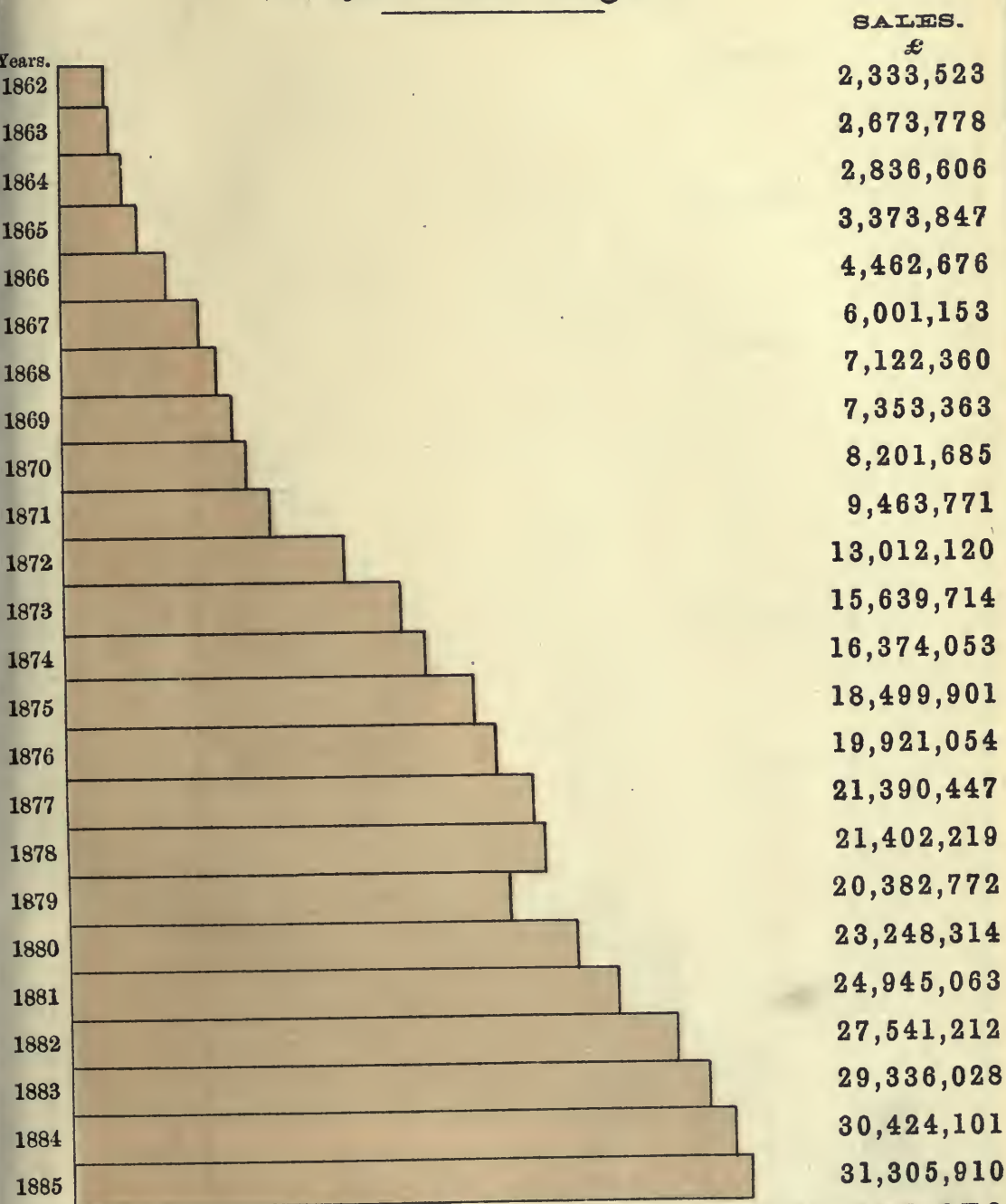
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PLATES, ADVERTISEMENTS, STATISTICS, &c.,

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# Twenty-four Years' Progress of Co-operative Societies in the United Kingdom.



TOTAL SALES IN THE TWENTY-FOUR YEARS, 1862 TO 1885 .. £367,245,670  
 TOTAL PROFITS IN THE TWENTY-FOUR YEARS, 1862 TO 1885 .. £29,959,561

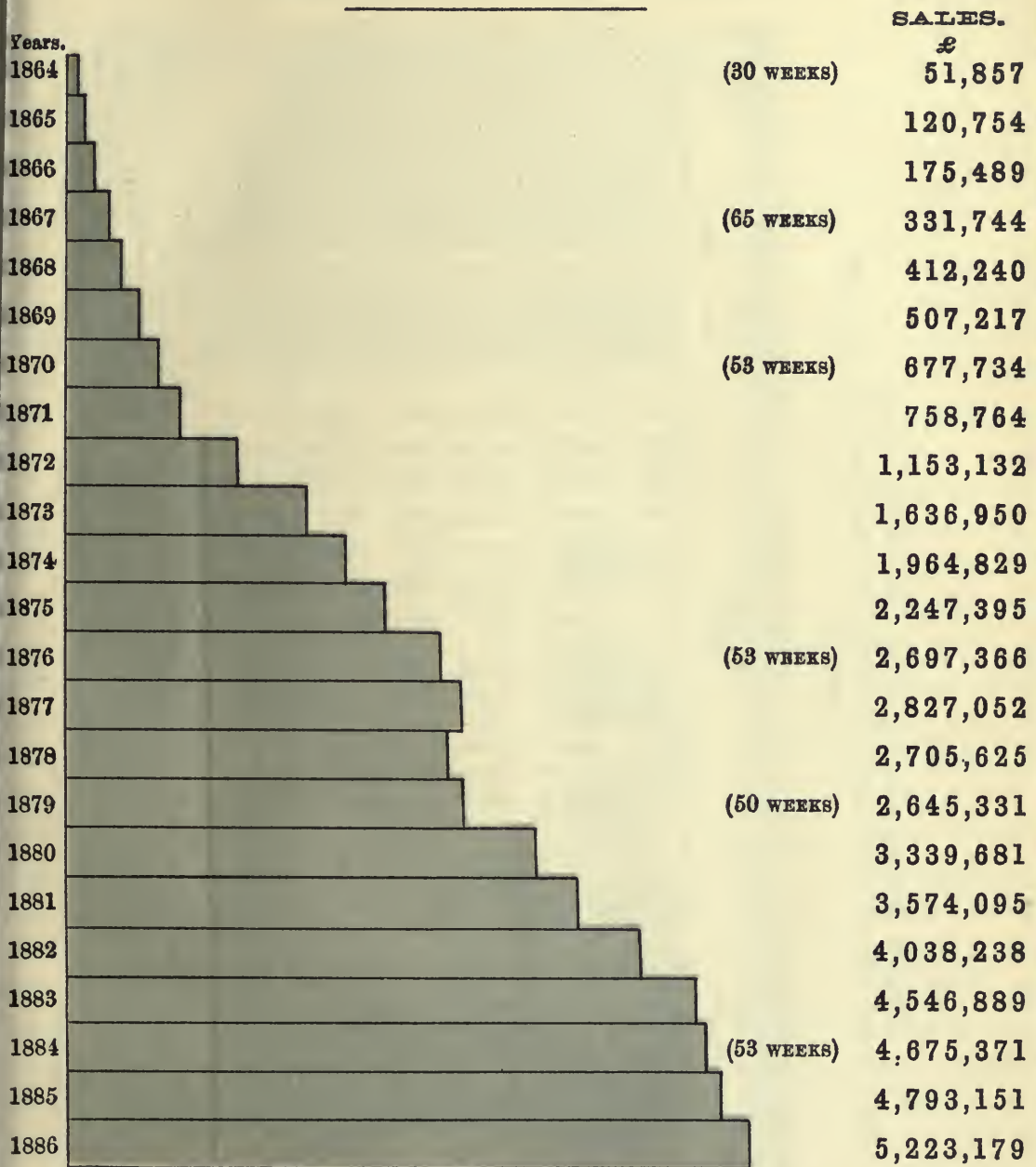
## STATISTICAL POSITION OF CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM, DECEMBER 31ST, 1885.

*Compiled from the Returns made by Societies to the Registrar and Central Board.*

Number of Members .....	850,659	Sales for 1885 .....	£31,305,910
Share Capital .....	£9,211,259	Net Profits for 1885 .....	2,988,690
Loan Capital .....	1,945,834	Devoted to Education, 1885 .....	20,712



# Twenty-three Years Progress of the Co-operative Wholesale Society Limited.



**TOTAL SALES IN THE TWENTY-THREE YEARS, 1864 TO 1886 .. £51,104,083**

**TOTAL PROFITS IN THE TWENTY-THREE YEARS, 1864 TO 1886 .. £652,055**

NOTE.—The above diagram is constructed to show the proportionate yearly variation in the sales. The size of each space is calculated on the basis of a year of 52 weeks.

## STATISTICAL POSITION OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

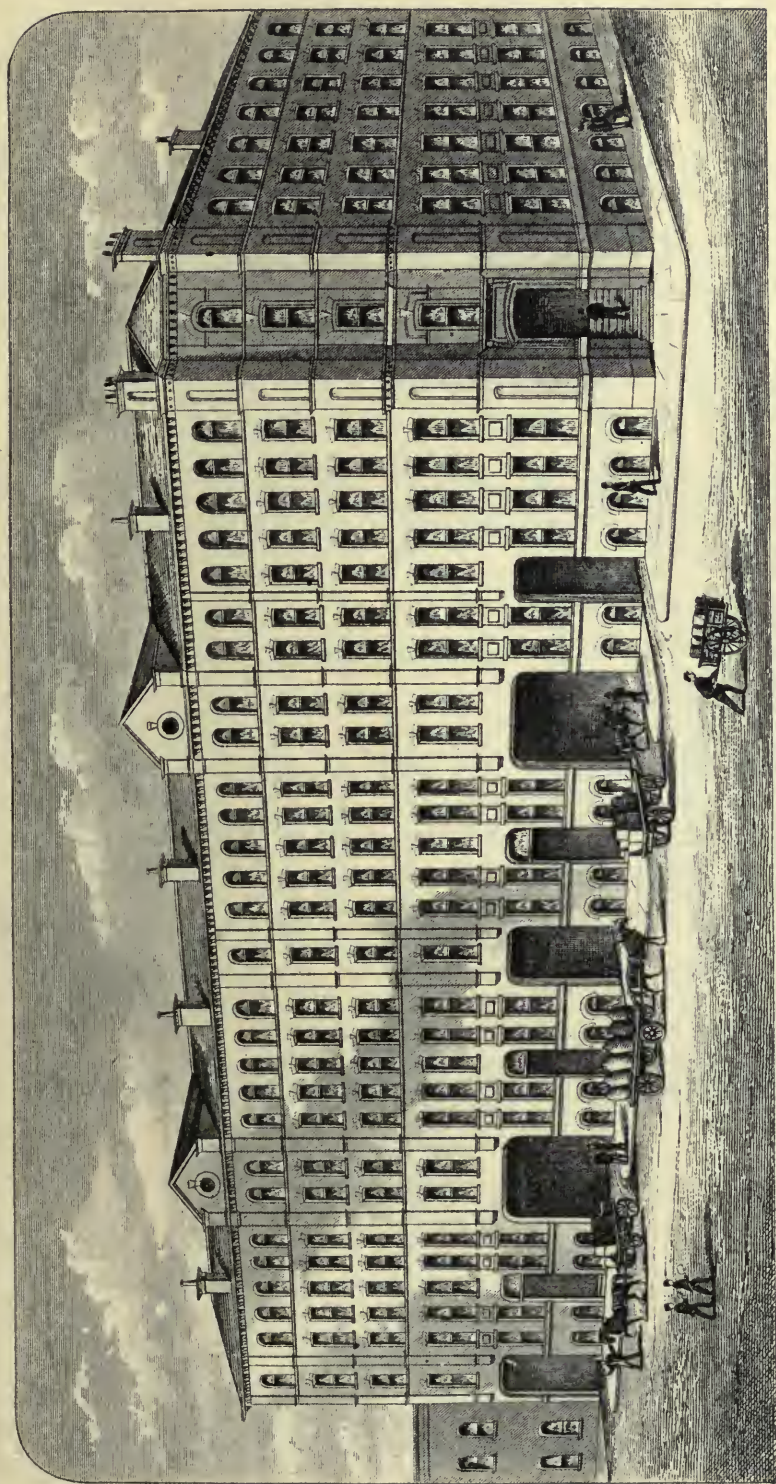
DECEMBER 26TH, 1886.

Number of Societies holding Shares .....	778		
Number of Members belonging to Share- holders .....	558,104	Reserve Fund.....	£ 33,059
Share Capital .....	£270,679	Insurance Fund.....	57,015
Loans and Deposits .....	£567,527	Sales for Year 1886 .....	5,223,179
		Net Profits for Year 1886 .....	83,328









MANCHESTER:  
REGISTERED OFFICES, BANK, CENTRAL GROCERY AND PROVISION WAREHOUSES,  
BALLOON STREET AND GARDEN STREET.—See pages 46, 48, and 64.







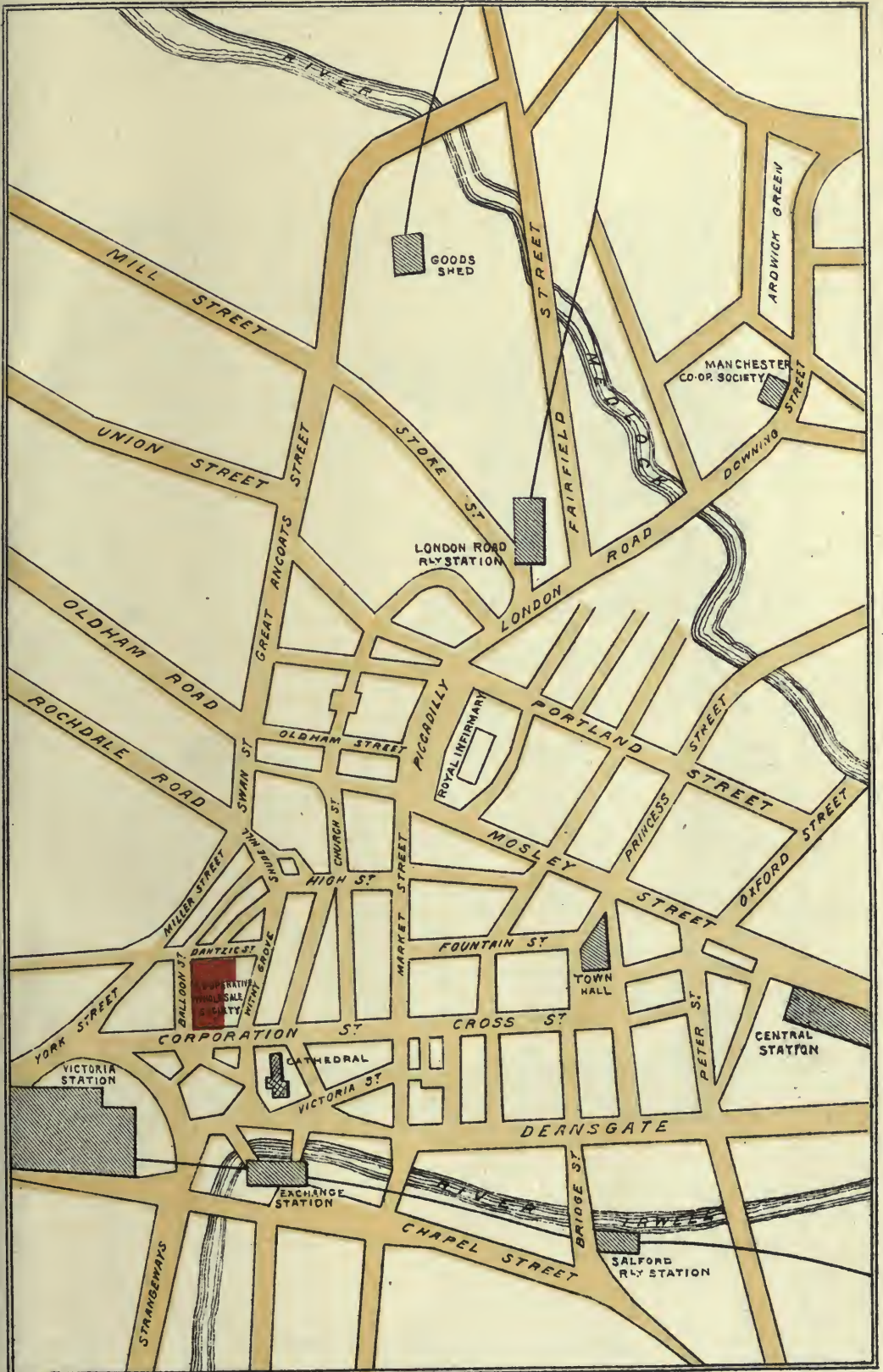
**MANCHESTER:**  
**DRAPERY WAREHOUSE, DANTZIC STREET.**

*See pages 27, 46, 49, and 62.*



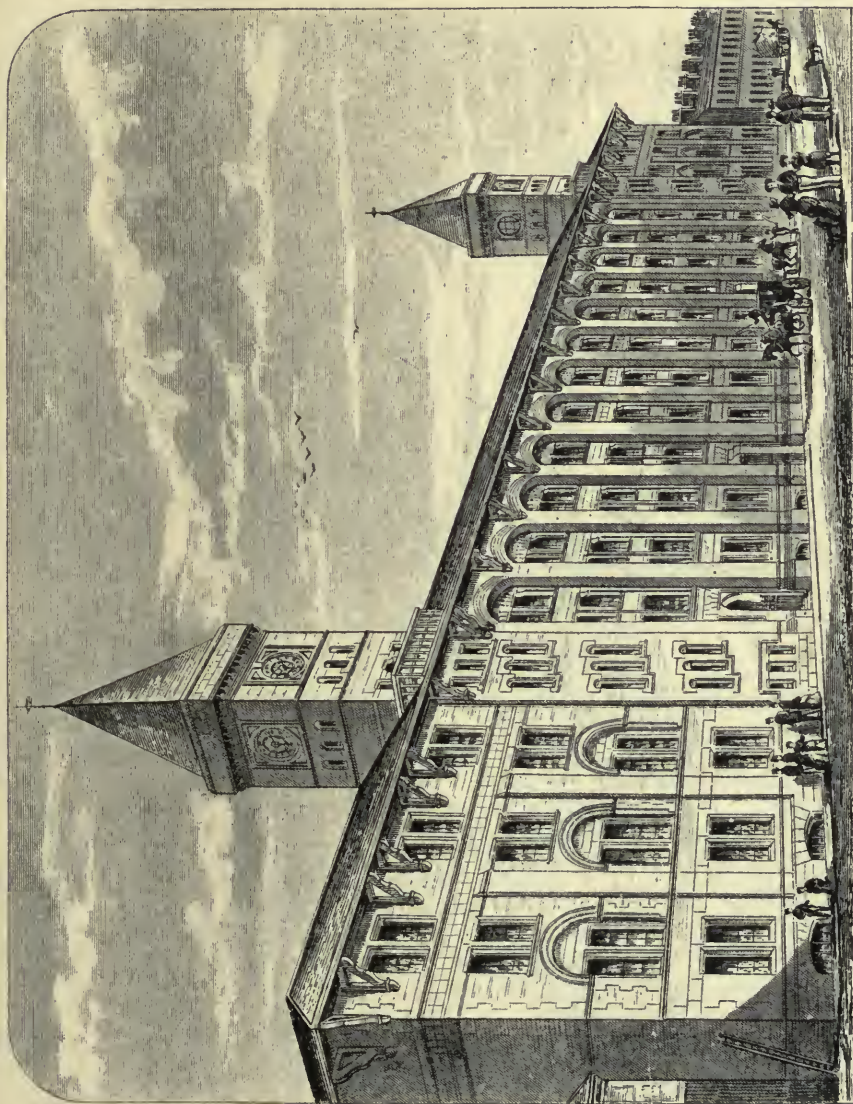


SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S CENTRAL  
OFFICES AND WAREHOUSE, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.









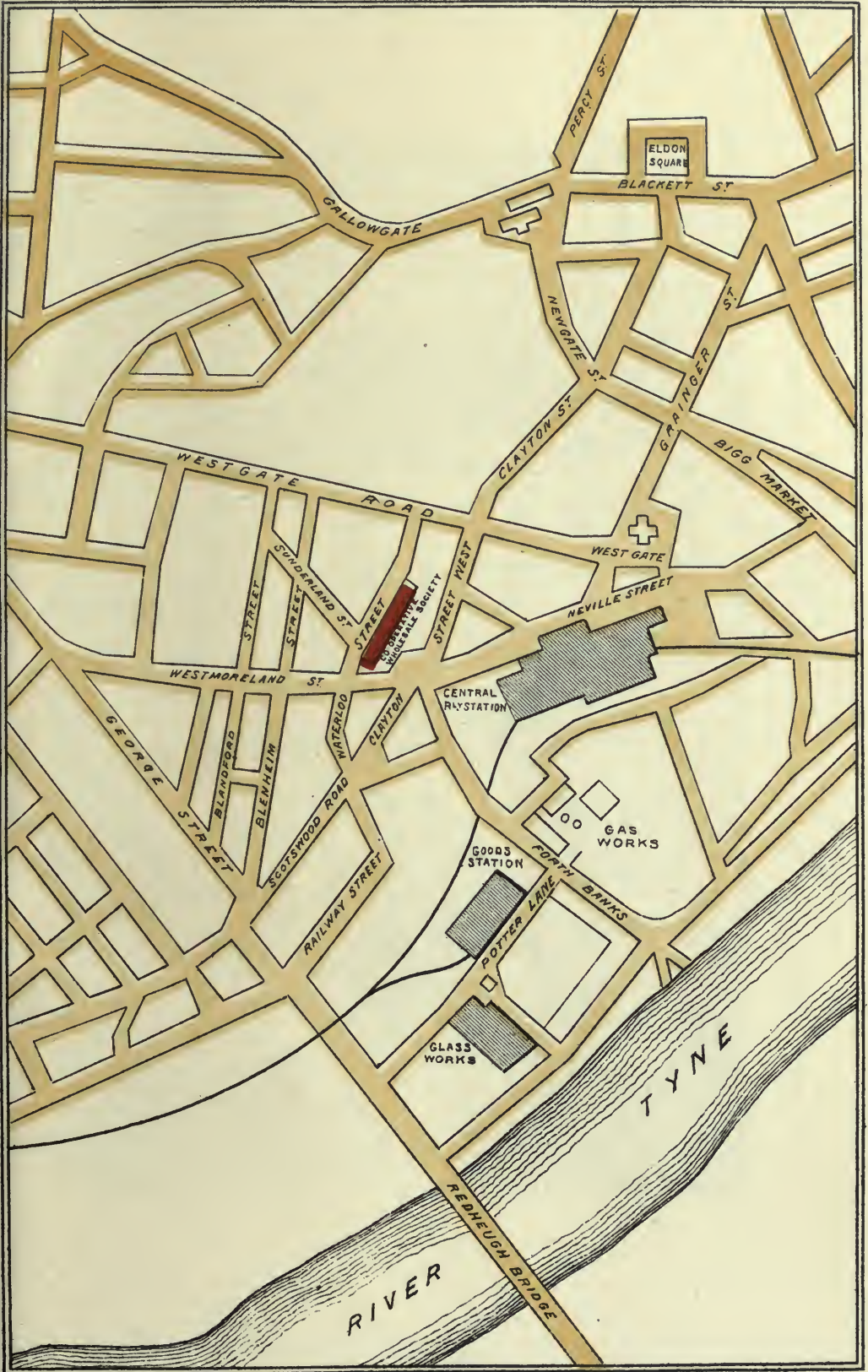
NEWCASTLE BRANCH,

WATERLOO STREET, NEWCASTLE-UPON-TYNE.—See pages 46 and 53-4-5, 66 and 67.



# PLAN OF NEWCASTLE,

SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S NEWCASTLE  
BRANCH PREMISES, FROM THE RAILWAY STATION AND PRINCIPAL PLACES.





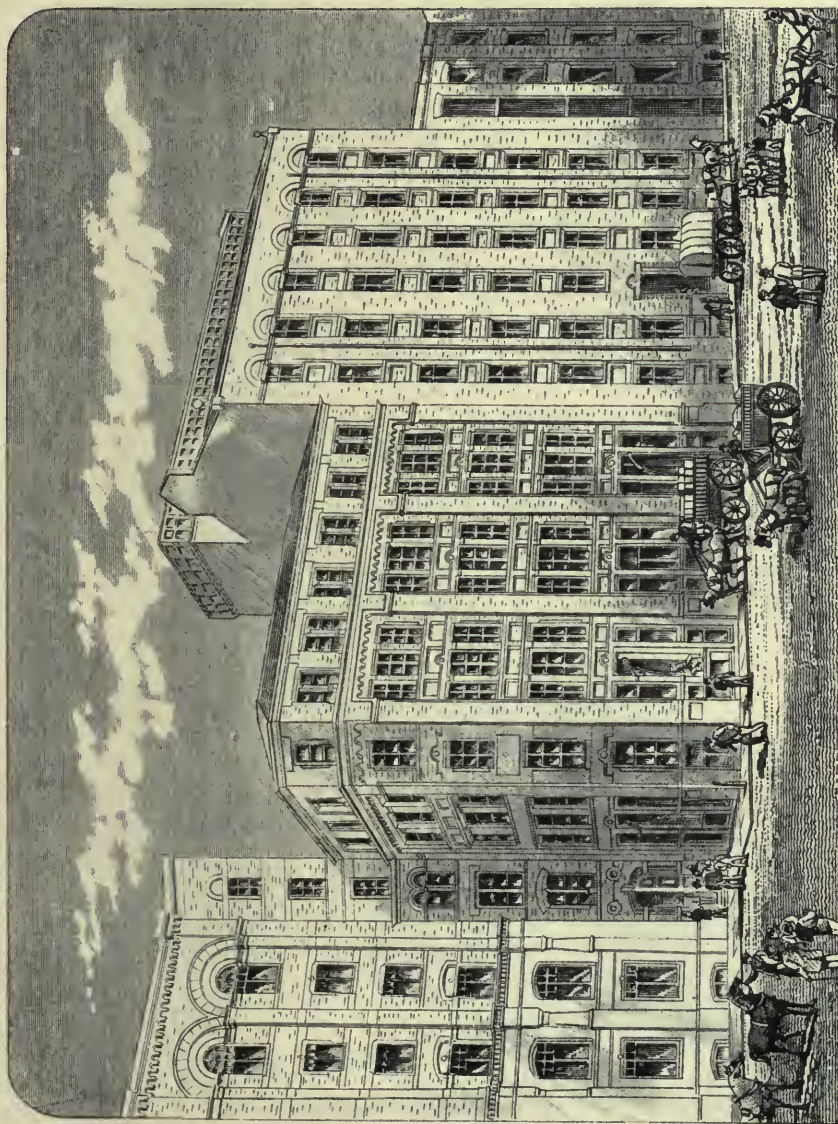




LONDON BRANCH:  
GENERAL OFFICES, GROCERY AND DRAPERY DEPARTMENTS, AND CO-OPERATIVE HALL,  
LEMAN STREET, E.—See pages 46, 56, 57, 67 and 68.





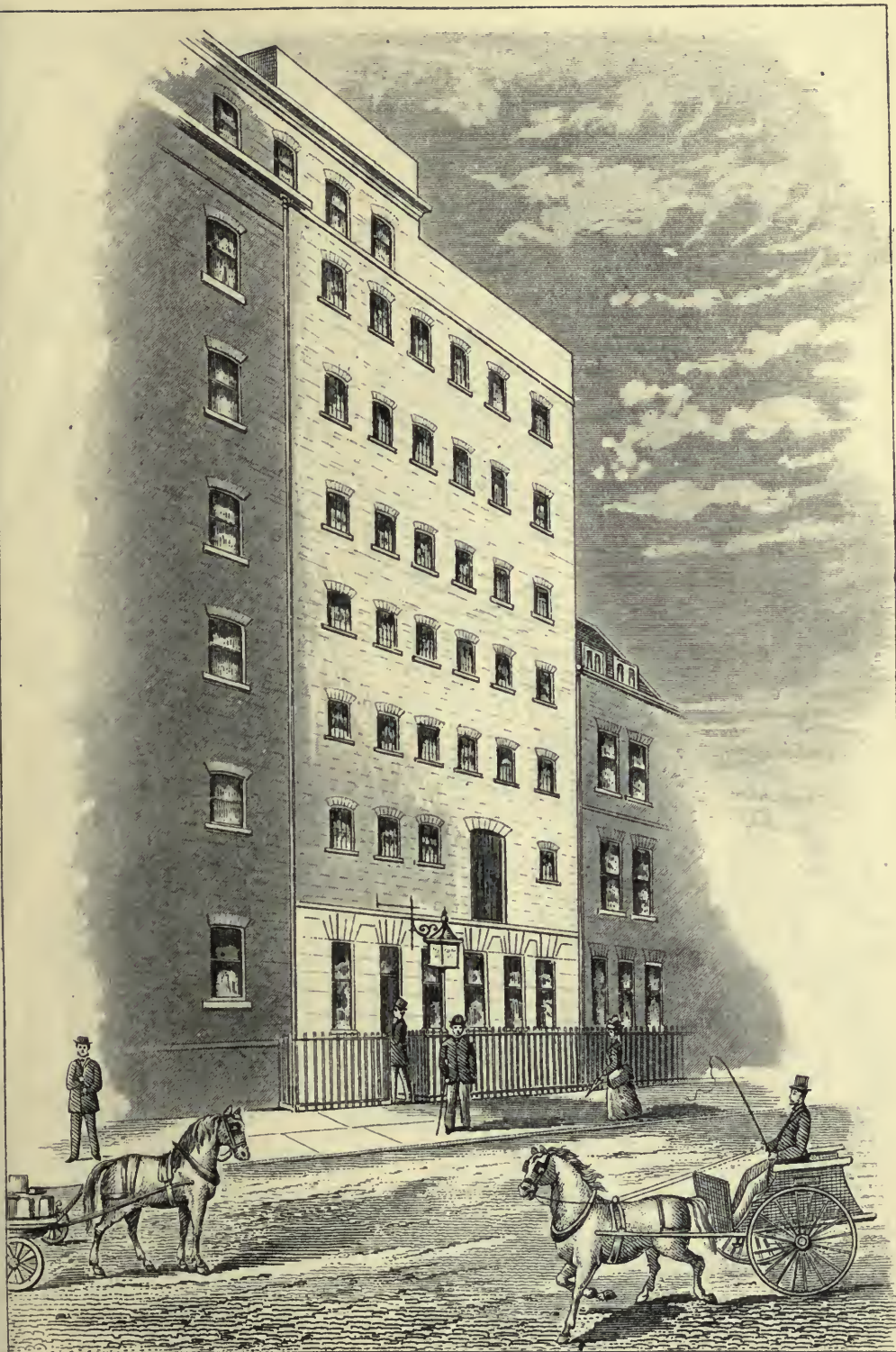


LONDON TEA DEPARTMENT.

*See pages 21-2-3-4, and 46.*







LONDON COCOA AND CHOCOLATE WORKS, 116, LEMAN STREET.

*See page 24.*





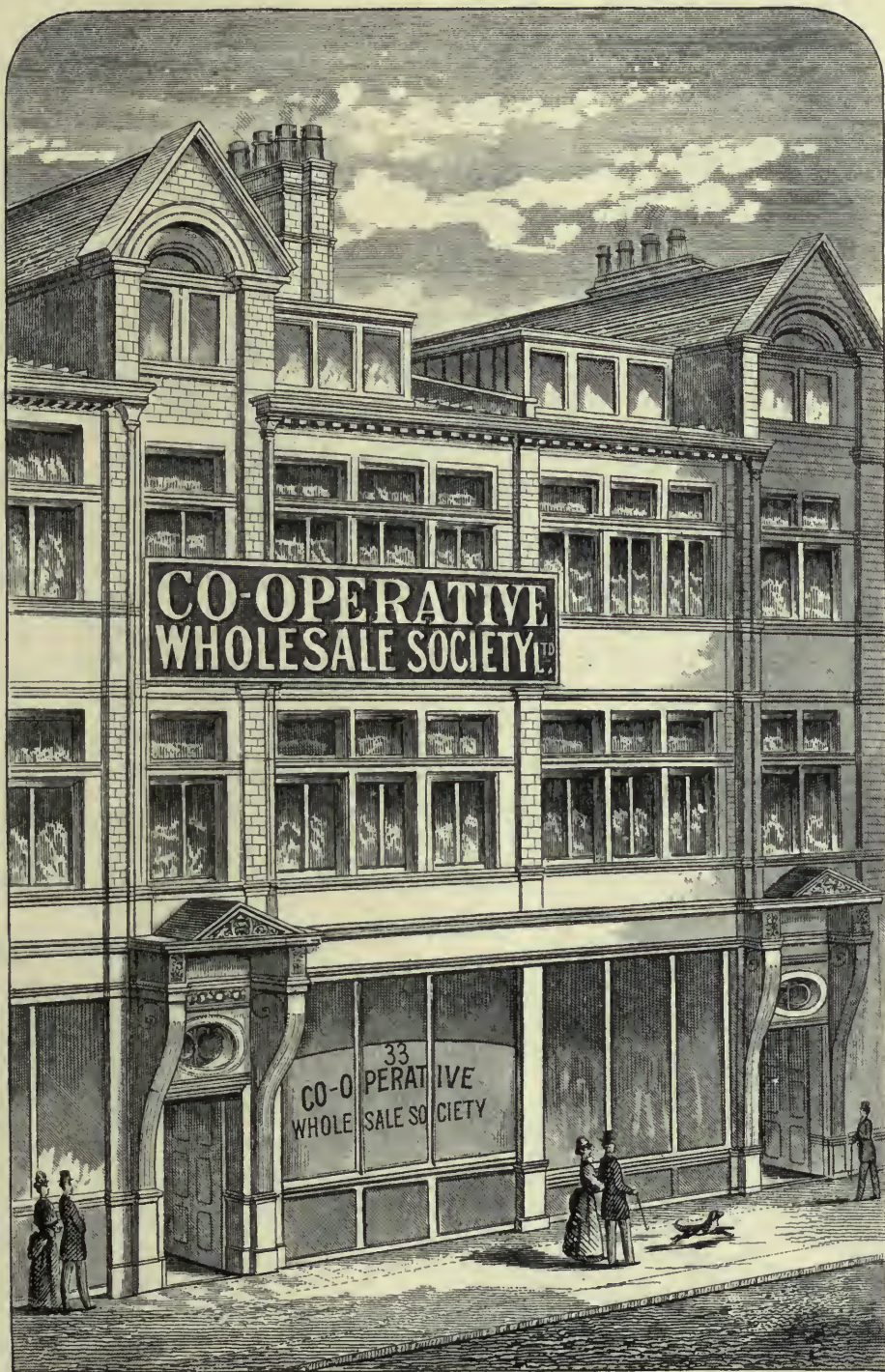
# MAP OF LONDON,

SHOWING THE LONDON BRANCH, LEMAN STREET, E., AND THE PRINCIPAL RAILWAY STATIONS.









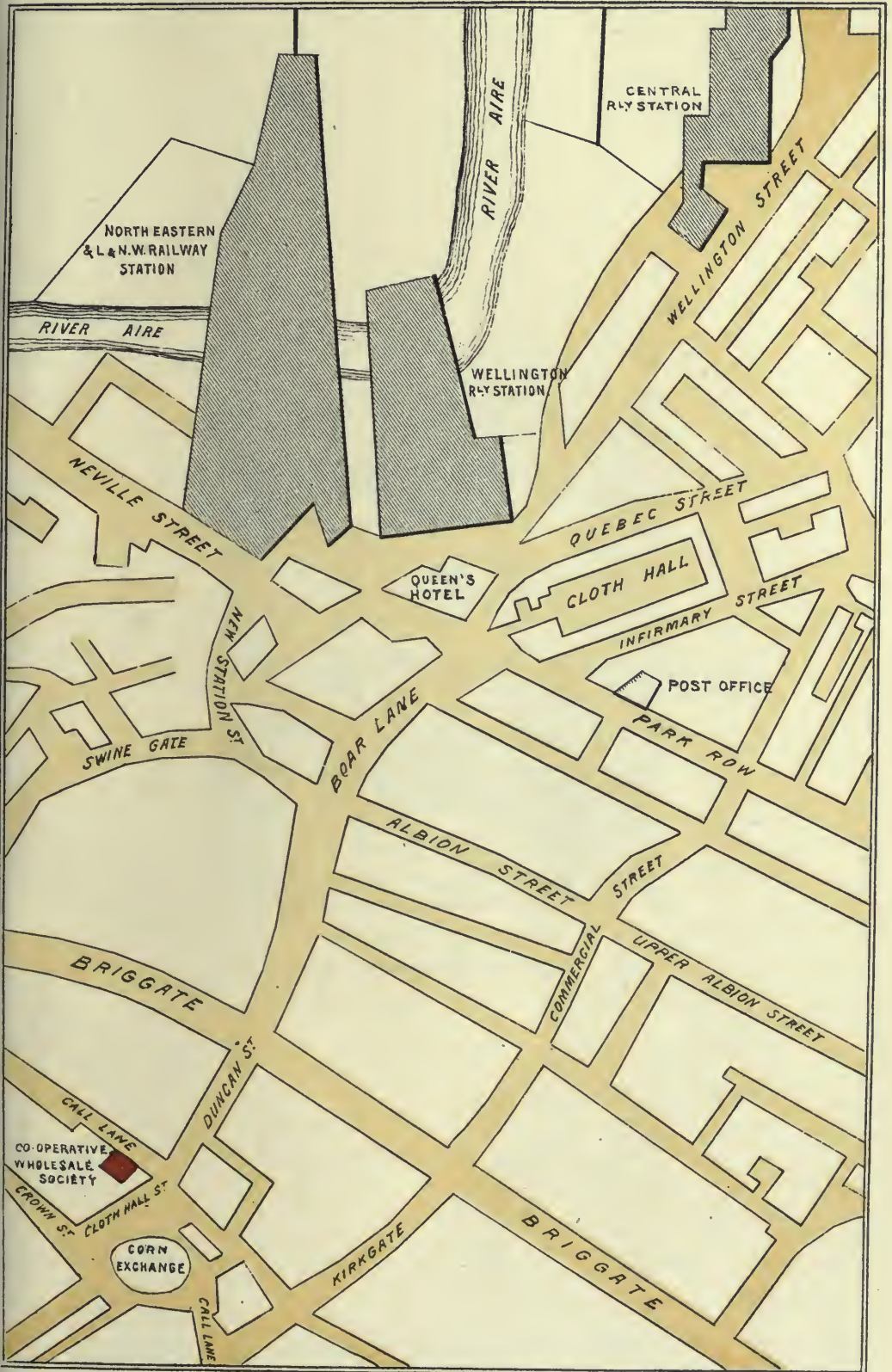
33, CALL LANE, LEEDS.





# PLAN OF LEEDS,

SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S SALE AND SAMPLE ROOM, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.







BRISTOL DEPOT,  
106, VICTORIA STREET.





**PLAN OF BRISTOL,**  
**SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S**  
**BRISTOL DEPÔT, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.**









LIVERPOOL OFFICES,  
VICTORIA BUILDINGS, VICTORIA STREET.





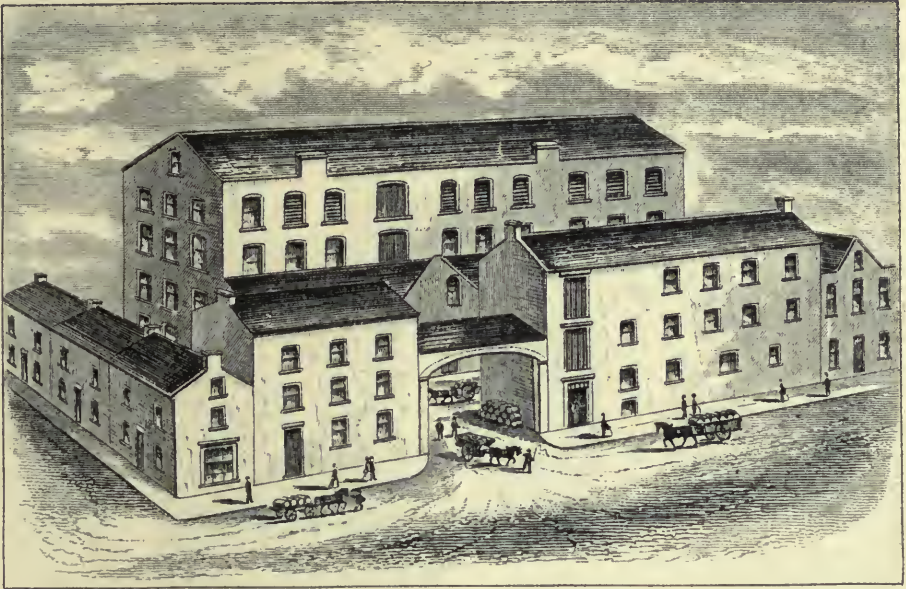


**NEW YORK PRODUCE EXCHANGE, BROADWAY, NEW YORK.**

**IN WHICH THE SOCIETY'S OFFICES ARE SITUATE.**







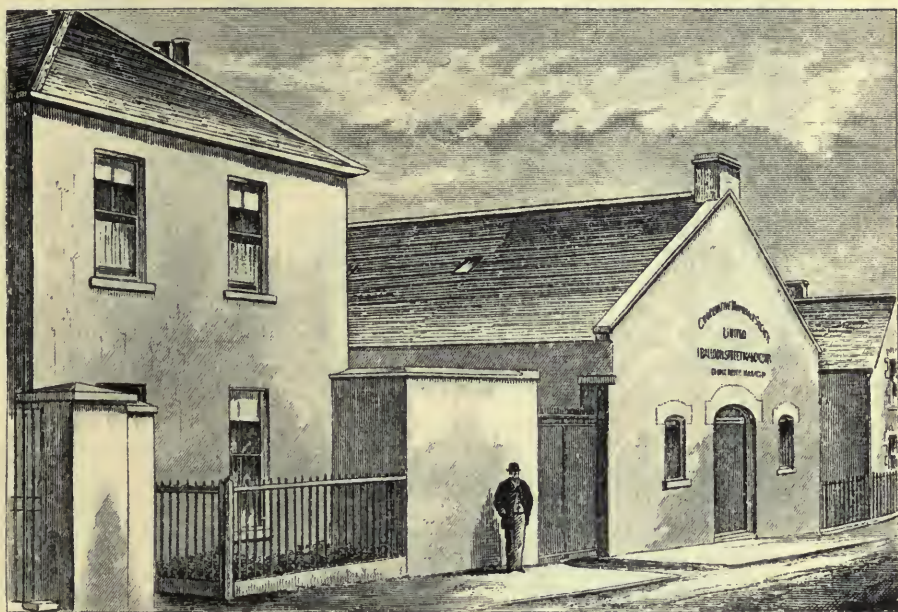
**CORK BRANCH,**  
**JOHN STREET, CORK, IRELAND.**



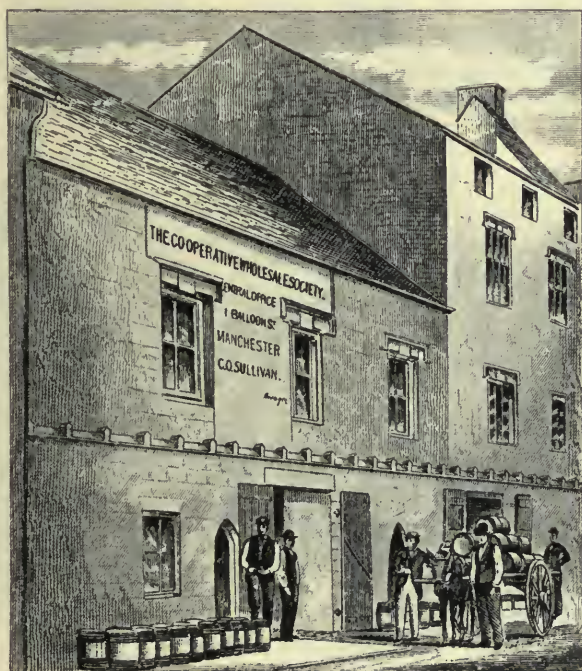
**LIMERICK BRANCH,**  
**MULGRAVE STREET, LIMERICK, IRELAND.**







TIPPERARY BRANCH,  
TIPPERARY, IRELAND.



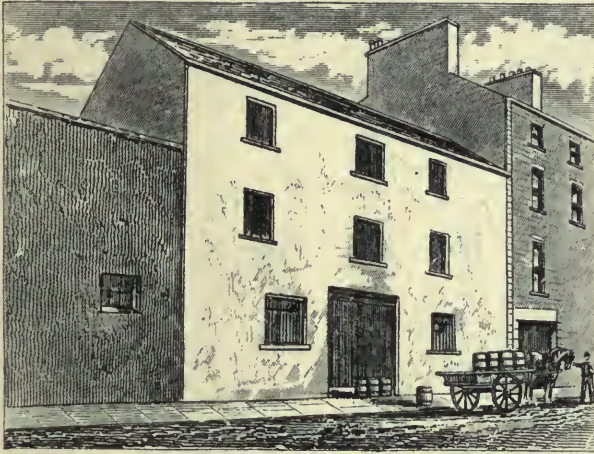
KILMALLOCK BRANCH,  
KILMALLOCK, IRELAND.



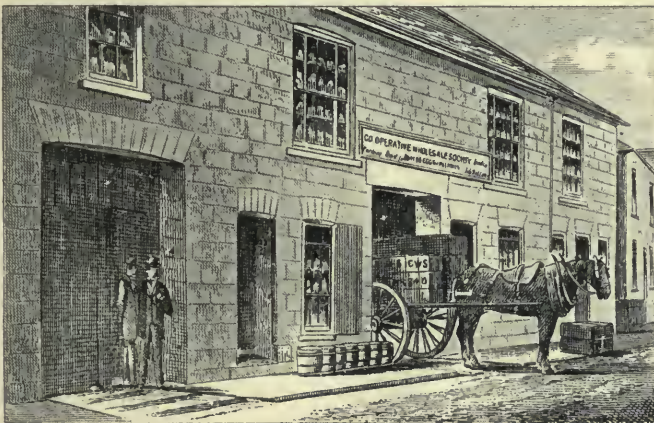




TRALEE BRANCH,  
TRALEE, IRELAND.



WATERFORD BRANCH.



ARMAGH BRANCH,  
17, DOBBIN STREET, ARMAGH, IRELAND.



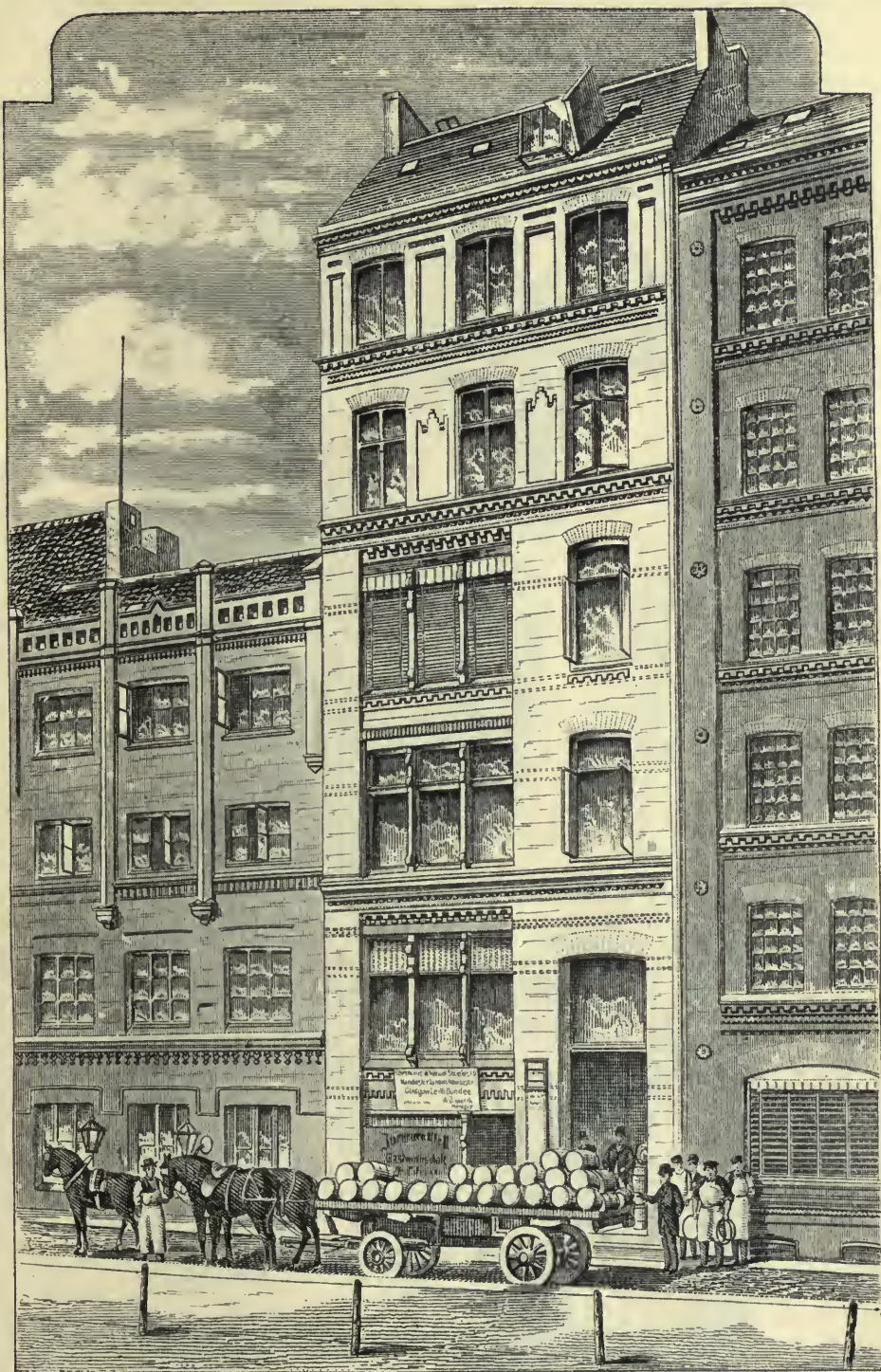


COPENHAGEN BRANCH.

HAVNEGADE, 89.



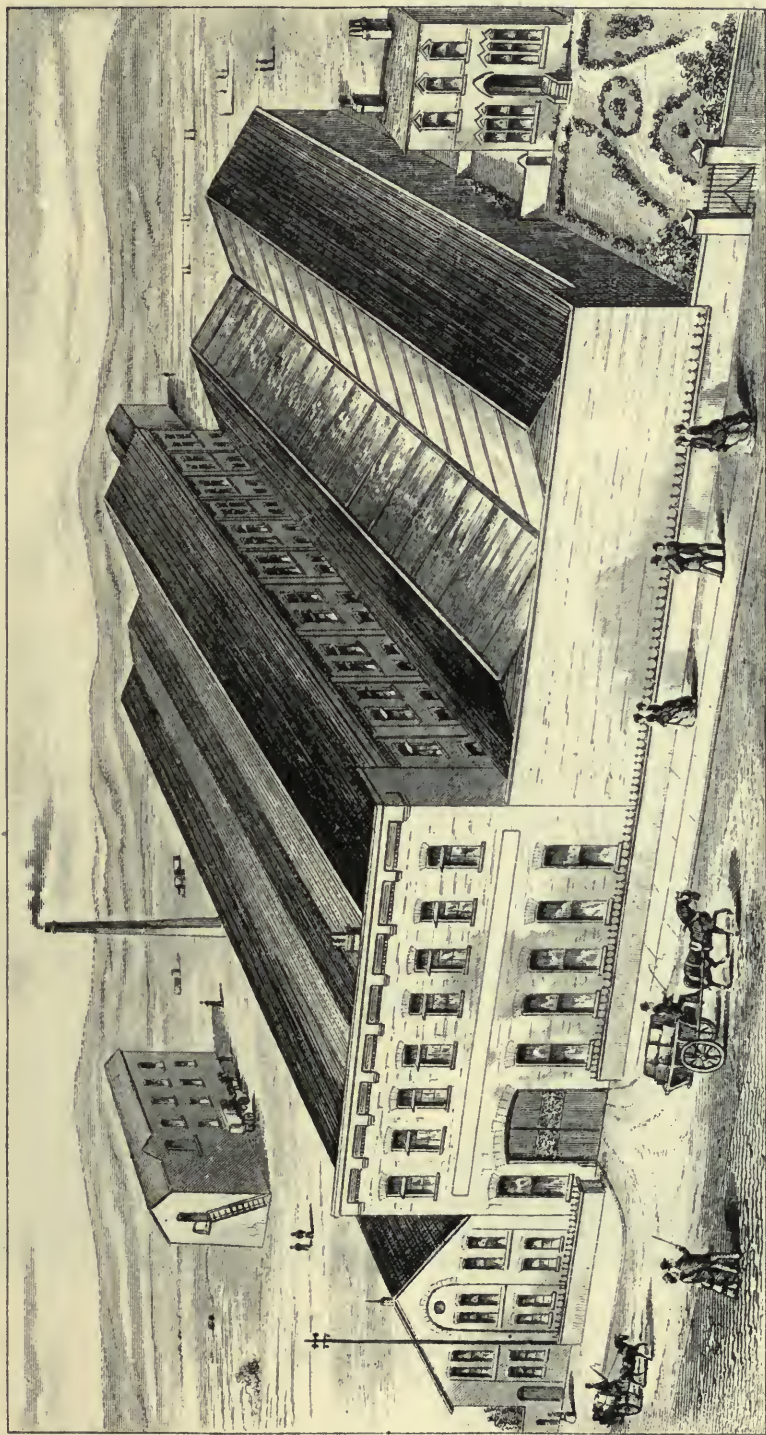




HAMBURG BRANCH,  
83, THEERHOF.





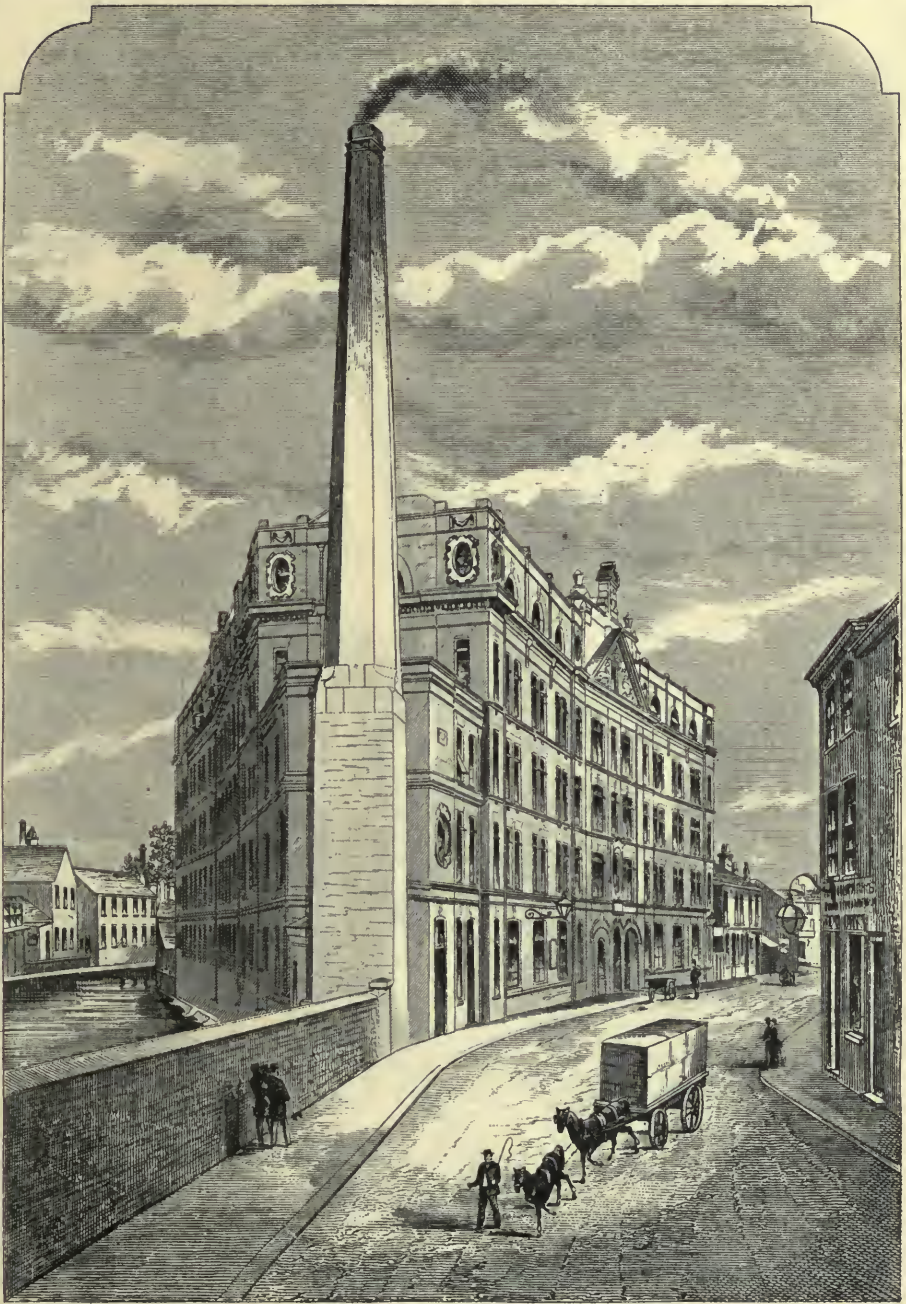


**CRUMPSALL BISCUITS AND SWEETS AND DRY AND SOFT SOAP WORKS,**

**LOWER CRUMPSALL, NEAR MANCHESTER.—See pages 25-6, 46, 58, and 68.**







**LEICESTER BOOT AND SHOE WORKS.**

*See pages 31, 46, 60, 61, and 69.*





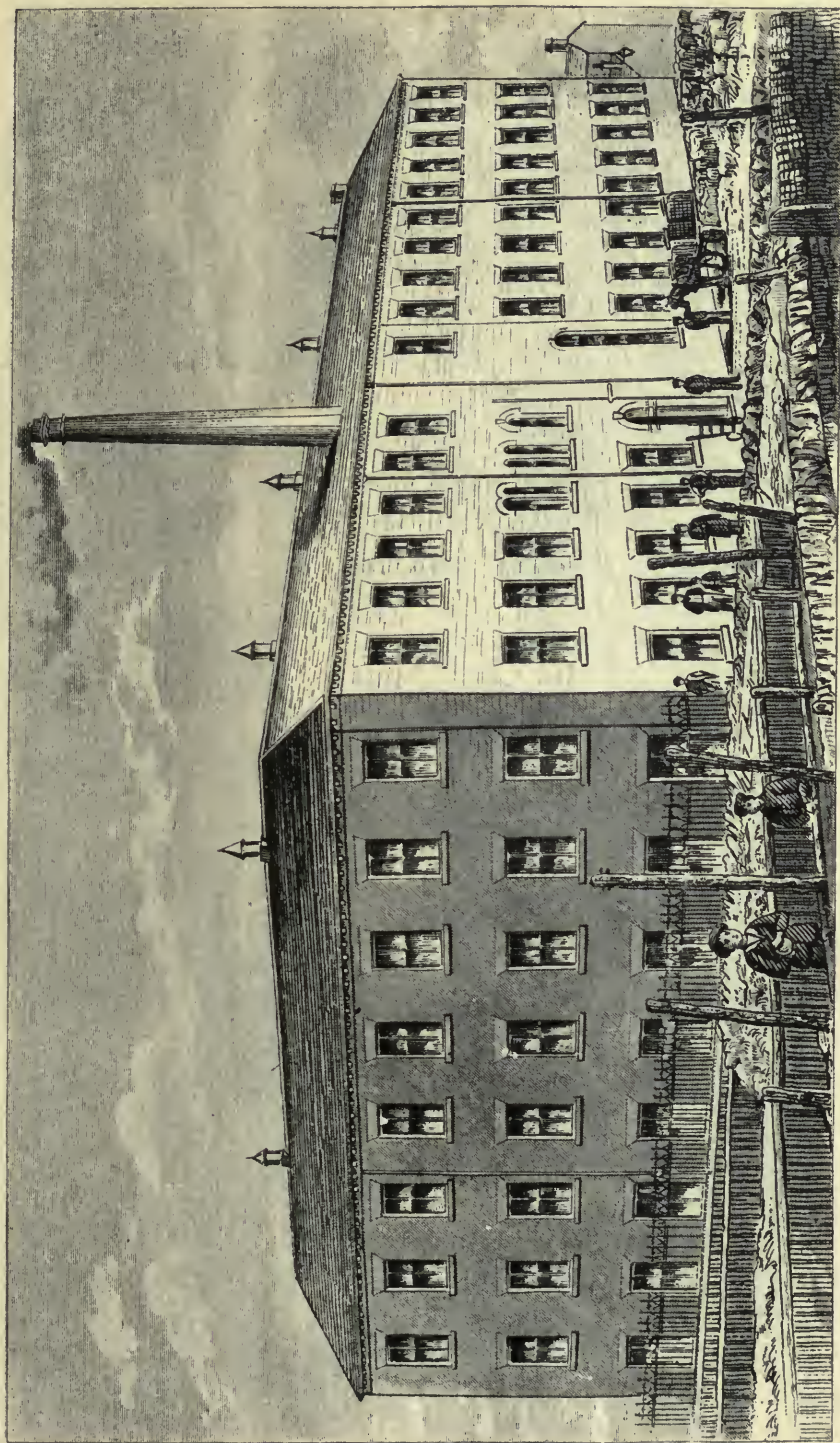
# PLAN OF LEICESTER,

SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S BOOT AND SHOE WORKS, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.







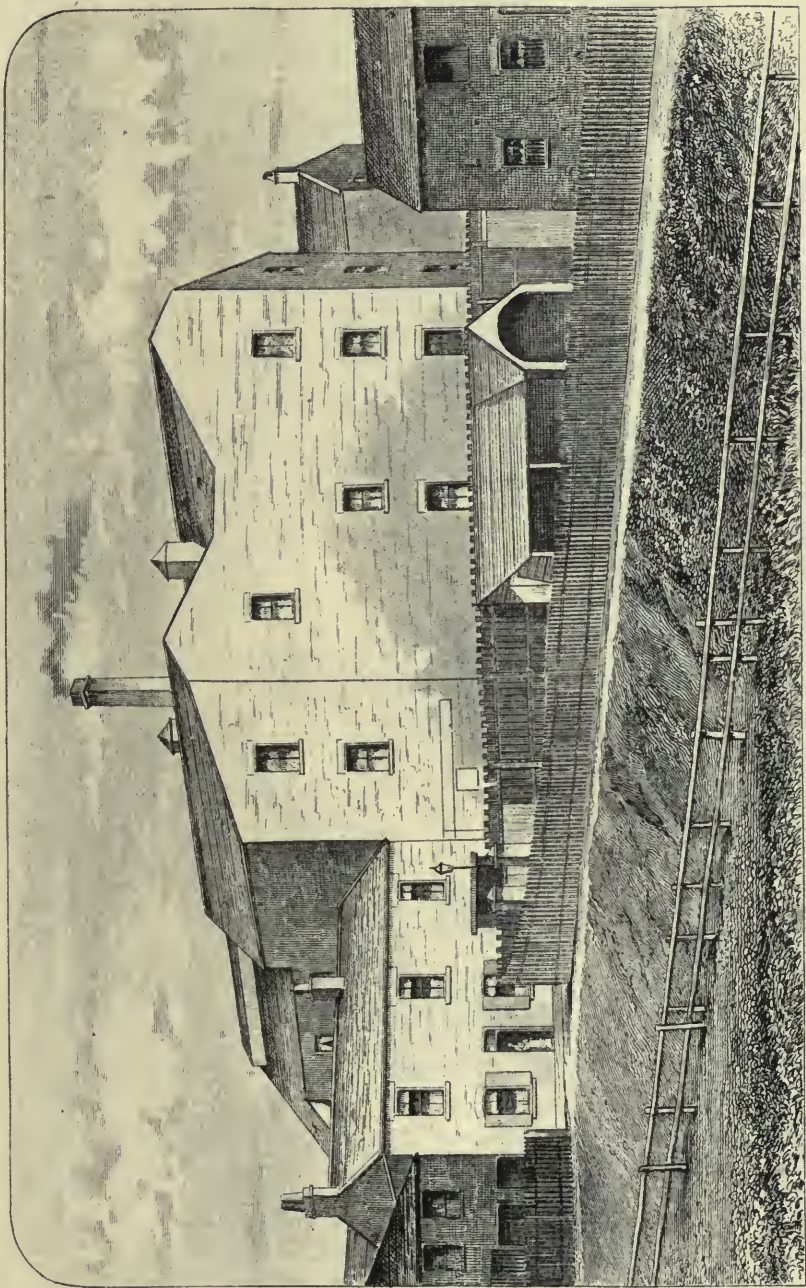


HECKMONDWIKE BOOT AND SHOE WORKS.

*See pages 32, 46, 59, and 70.*





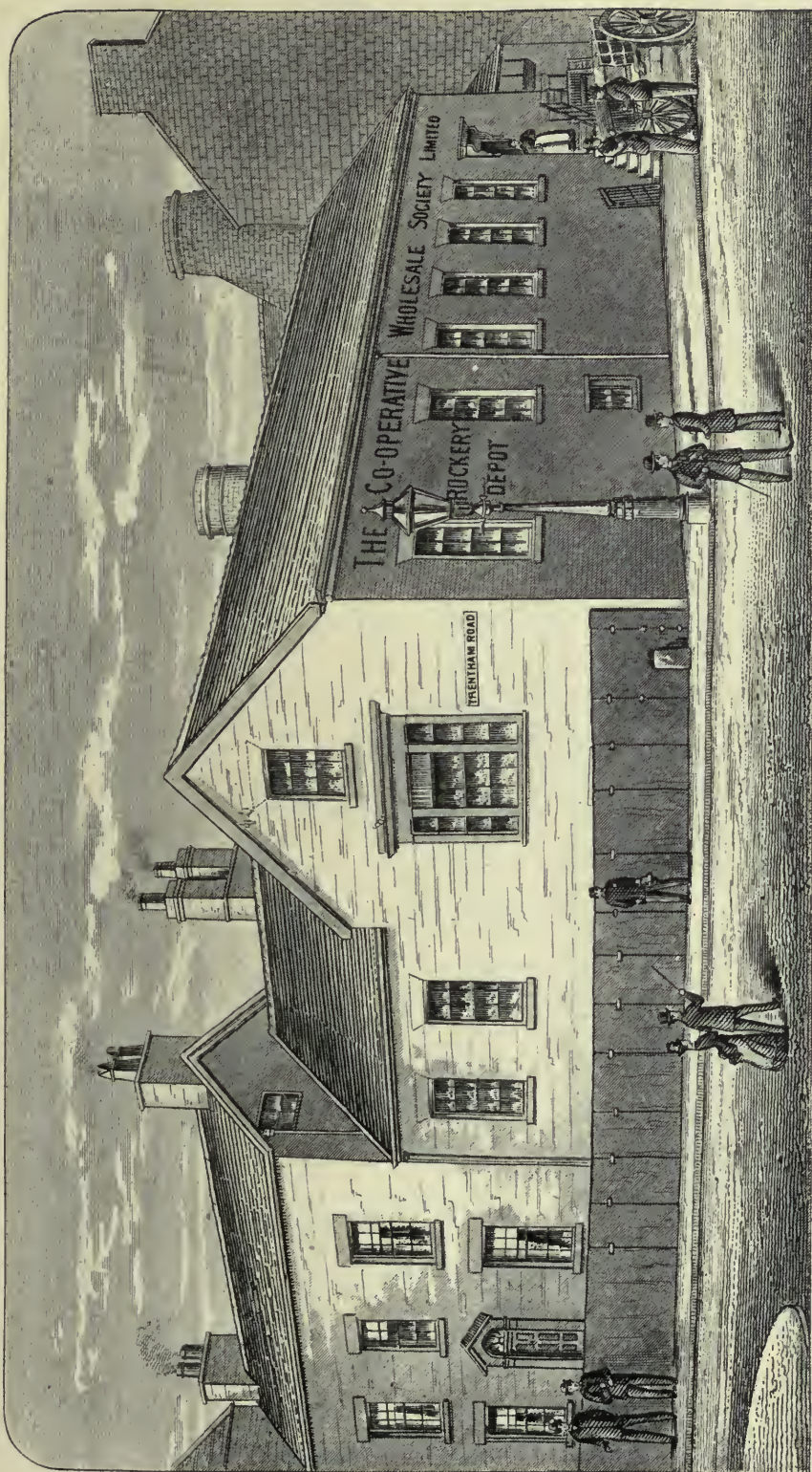


**DURHAM SOAP WORKS.**

*See pages 53, 46, 62, 63, and 69.*







LONGTON CROCKERY DEPOT.







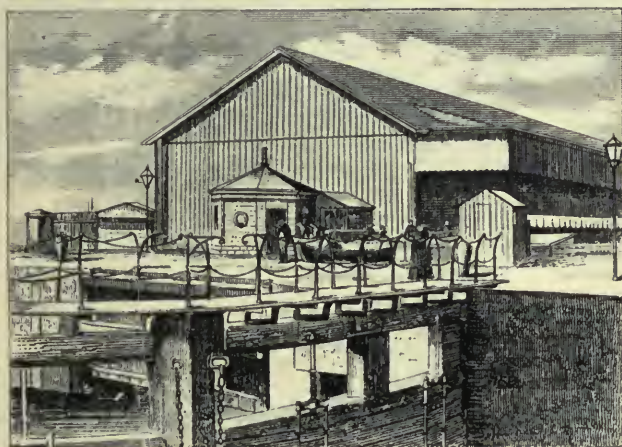
BATLEY WOOLLEN CLOTH WORKS.







GOOLE OFFICES.



GARSTON OFFICES,  
WEST SIDE, NEW DOCK, GARSTON, NEAR LIVERPOOL.



ROUEN OFFICES,  
2, RUE JEANNE D'ARC, ROUEN, FRANCE.







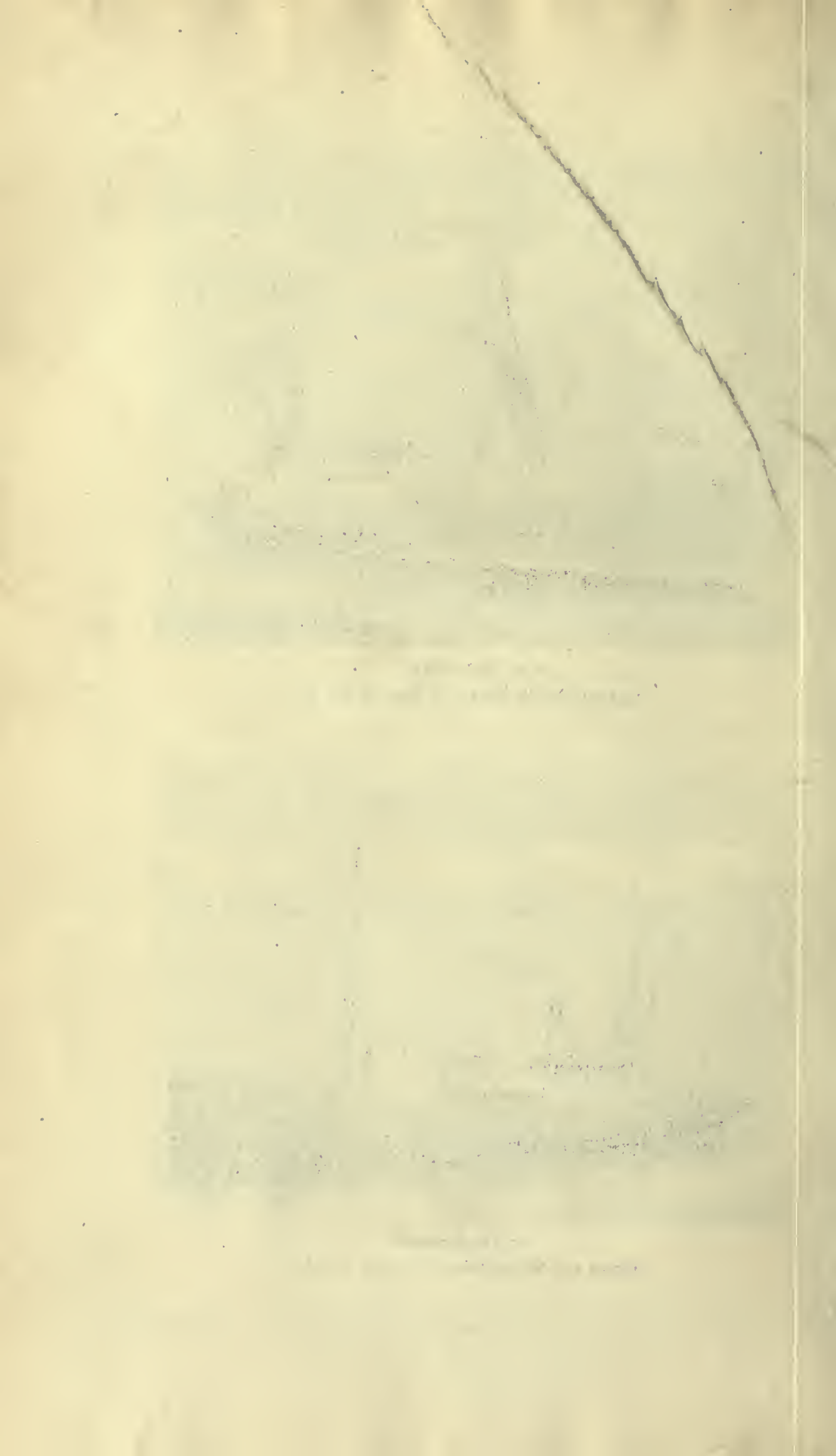
**S.S. "PIONEER."**

**GARSTON-ROUEN LINE.**—*See pages 37 and 46.*



**S.S. "CAMBRIAN."**

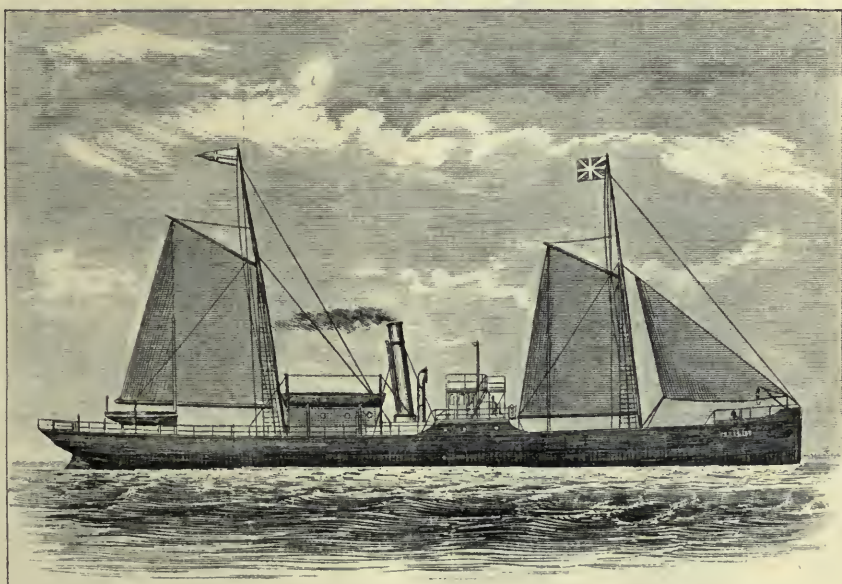
**GOOLE AND CALAIS LINE.**—*See pages 38 and 46.*







S.S. "UNITY,"  
GOOLE-HAMBURG LINE.—See pages 39 and 46.



S.S. "PROGRESS."  
GOOLE-HAMBURG LINE.—See pages 39 and 46.







S.S. "FEDERATION."

GOOLE-HAMBURG LINE.—See pages 39 and 46.





# Co-operative Wholesale Society Limited.

*Enrolled August 11th, 1863, under the Provisions of the Industrial and Provident Societies Act, 25 and 26 Vict., cap. 87, sec. 15, 1862.*

**Business commenced March 14, 1864.      Shares, £5 each, Transferable.**

**CENTRAL OFFICES,  
BANK, AND GROCERY AND PROVISION WAREHOUSE:  
BALLOON STREET, MANCHESTER.**

**DRAPERY, WOOLLEN CLOTH, AND READY-MADES WAREHOUSES:  
DANTZIC STREET, MANCHESTER.**

**BOOT AND SHOE AND FURNITURE WAREHOUSES:  
HOLGATE STREET, MANCHESTER.**

**BRANCHES:  
WATERLOO STREET, NEWCASTLE-ON-TYNE, AND LEMAN STREET,  
LONDON, E.**

**PURCHASING AND FORWARDING DEPOTS:  
ENGLAND: LIVERPOOL, LEEDS, BRISTOL, NOTTINGHAM, LONGTON,  
GOOLE, AND GARSTON.  
IRELAND: CORK, LIMERICK, TIPPERARY, KILMALLOCK, WATERFORD,  
TRALEE, AND ARMAGH.  
AMERICA: NEW YORK.    FRANCE: CALAIS AND ROUEN.  
DENMARK: COPENHAGEN AND HAMBURG.**

**BISCUIT AND SWEET WORKS, AND DRY AND SOFT SOAP WORKS:  
CRUMPSALL, NEAR MANCHESTER.  
BOOT AND SHOE WORKS: WEST END SHOE WORKS, LEICESTER,  
AND HECKMONDWIKE, YORKSHIRE.  
SOAP WORKS: DURHAM.  
WOOLLEN CLOTH WORKS: LIVINGSTONE MILL, BATLEY.  
COCOA AND CHOCOLATE WORKS: 116, LEMAN STREET, LONDON.**

**SHIPOWNERS AND SHIPPERS:  
BETWEEN GARSTON (Liverpool), ENGLAND, AND ROUEN (France);  
GOOLE (ENGLAND) AND CALAIS (France);  
GOOLE AND HAMBURG.**

**Steamships Owned by the Society:  
"PIONEER," "CAMBRIAN," "UNITY," "PROGRESS," AND "FEDERATION."**

**BANKERS:  
THE MANCHESTER AND COUNTY BANK LIMITED.  
THE LONDON AND COUNTY BANK.  
THE NATIONAL PROVINCIAL BANK OF ENGLAND.  
THE MANCHESTER AND LIVERPOOL DISTRICT BANK.  
THE LANCASHIRE AND YORKSHIRE BANK.  
THE UNION BANK OF MANCHESTER.**

# CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## GENERAL COMMITTEE.

PRESIDENT:		SECRETARY:	
MR. J. T. W. MITCHELL, 15, John Street, Rochdale.		MR. THOMAS SWANN, 50, Hope Street, Thornhill, Masborough.	
MR. WILLIAM BATES	.....Green Lane, Patricroft.		
MR. THOMAS BLAND	.....Rashcliffe, Huddersfield.		
MR. JAMES CRABTREE	.....Church Street, Heckmondwike.		
MR. E. HIBBERT	.....7, Wicken Tree Lane, Failsworth.		
MR. JAMES HILTON	.....165, Ashton Road, Oldham.		
MR. THOMAS HIND	.....3, Grey Friars, Leicester.		
MR. SAMUEL LEVER	.....19, Bold Street, Lower Rockcliffe, Bacup.		
MR. JOHN LORD	.....16, Steiner Street, Accrington.		
MR. JAMES LOWNDS	.....92, Catherine Street, Ashton-under-Lyne.		
MR. ALFRED NORTH	.....Mount Pleasant, Batley.		
MR. H. C. PINGSTONE	.....Market Street, Manchester.		
MR. JOHN SHILLITO	.....17, Cavendish Terrace, Halifax.		
MR. JOHN STANSFIELD	....Jeremy Lane, Heckmondwike.		
MR. SAMUEL TAYLOR	.....71, Haydock Street, Bolton.		

## NEWCASTLE BRANCH COMMITTEE.

CHAIRMAN:		SECRETARY:	
MR. GEORGE SCOTT, Co-op. Society, Newbottle, Fencehouses, Durham.		MR. JOHN THIRLAWAY, 37, Lincoln Street, Gateshead.	
MR. J. ATKINSON	.....12, Mutual Street, Wallsend, nr. Nc.-on-Tyne.		
MR. MATTHEW BATES	.....Blaydon Burn, Blaydon-on-Tyne.		
MR. GEORGE FRYER	.....Shankhouse, Cramlington.		
MR. WILLIAM GREEN	.....Co-operative Society, Clay Path, Durham.		
MR. THOMAS SHOTTON	....Cemetery Road, Blackhill, Durham.		
MR. RICHARD THOMPSON	..15½, Crowtree Rd., Bishopwearmouth, Sunderland		

## LONDON BRANCH COMMITTEE.

CHAIRMAN:		SECRETARY:	
MR. GEO. SUTHERLAND, 78, Maxey Road, Plumstead.		MR. HENRY PUMPHREY, Paddock Terrace, Lewes.	
MR. JOSEPH CLAY	.....Stratton Road, Gloucester.		
MR. GEO. HAWKINS	.....52, Kingston Road, Oxford.		
MR. GEORGE HINES	.....Croft Street, Ipswich.		
MR. FREDERICK LAMB	....47, Broad Street, Banbury, Oxon.		
MR. T. E. WEBB	.....Co-operative Society, 1, Plough Lane, York Road, Battersea, London, S.W.		
MR. JNO. J. B. BEACH	.....Mersea Road, Colchester.		

## AUDITORS.

MR. WM. APPLEBY, Manchester.	MR. THOMAS WOOD, Manchester.
MR. THOS. J. BAYLIS, Masbro'.	MR. JAMES E. LORD, Rochdale.



# CO-OPERATIVE WHOLESALE SOCIETY

## LIMITED.

### ACCOUNTANT.

MR. THOMAS BRODRICK, Eccles.

### CASHIER.

MR. A. GREENWOOD, Rochdale.

### BUYERS, SALESMEN, &c.

MANCHESTER—Grocery and Provisions .....	Mr. ISAAC TWEEDALE.
" " .....	Mr. THOMAS PEARSON.
" " .....	Mr. GEORGE GARLICK.
" " .....	Mr. WILLIAM WROOT.
" Drapery .....	Mr. JAMES FLETCHER.
" " .....	Mr. WILLIAM T. ALLITT.
" " .....	Mr. JOHN SHARROCKS.
" " .....	Mr. JOHN T. OGDEN.
" Woollen Cloth .....	Mr. HENRY HADDOW.
" Boot and Shoe .....	Mr. HENRY JACKSON.
" Furniture .....	Mr. JOSEPH ATKIN.
" Traveller—Grocery and Provisions ...	Mr. R. TURNER.
" " Productive Societies and } Drapery .....	Mr. JOS. PICKERSGILL.
" " Boots and Shoes .....	Mr. H. BENNETT.
SHIPPING DEPARTMENT—General Manager .....	Mr. CHAS. R. CAMERON.
LIVERPOOL—Grocery and Provisions .....	Mr. ARTHUR W. LOBB.
LEEDS—Saleroom .....	Mr. JOSEPH HOLDEN.
NOTTINGHAM—Saleroom .....	Mr. G. T. TOWNSEND.
LONGTON—Crockery Depôt .....	Mr. J. RHODES.
NEWCASTLE—Chief Clerk .....	Mr. H. R. BAILEY.
" Grocery and Provisions .....	Mr. MICHAEL URWIN.
" " .....	Mr. ROBT. WILKINSON.
" Drapery .....	Mr. JOHN McKENZIE.
" Boot and Shoe and Furnishing .....	Mr. O. JACKSON.
LONDON—Grocery and Provisions .....	Mr. BENJAMIN JONES.
" " .....	Mr. WM. OPENSHAW.
" Tea and Coffee .....	Mr. CHARLES FIELDING.
" Drapery, Boots and Shoes, and Furnishing ..	Mr. F. J. FINLAYSON.
" Chief Clerk .....	Mr. WILLIAM STRAWN.
BRISTOL DEPÔT .....	Mr. THOS. FOULKES.
CORK—Butter .....	Mr. WILLIAM H. STOTT.
LIMERICK—Butter .....	Mr. WILLIAM L. STOKES.
KILMALLOCK " .....	Mr. THOS. G. O'SULLIVAN.
TIPPERARY " .....	Mr. GEORGE BOOTH.
WATERFORD " .....	Mr. J. T. FIELDING.
TRALEE—Butter and Eggs .....	Mr. JAMES DAWSON.
ARMAGH " .....	Mr. J. HOLLAND.
NEW YORK, AMERICA—Cheese, &c. ....	Mr. JOHN GLEDHILL.
" " .....	Mr. JAMES M. PERCIVAL.
COPENHAGEN, DENMARK—Butter, Flour, &c. ....	Mr. JOHN ANDREW.
HAMBURG—Butter, Flour, &c. ....	Mr. WM. DILWORTH.
ROUEN, FRANCE Shipping and Forwarding Depôt ...	Mr. JAMES MARQUIS.
CALAIS " .....	Mr. WILLIAM HURT.
GOOLE " .....	Mr. W. J. SCHOFIELD.
LOWER CRUMPSALL BISCUIT WORKS .....	Mr. THOMAS HAYES.
LEICESTER BOOT AND SHOE WORKS .....	Mr. JOHN BUTCHER.
HECKMONDWIKE BOOT AND SHOE WORKS .....	Mr. J. W. HEMMINGS.
DURHAM SOAP WORKS .....	Mr. WILLIAM JACKSON.
BATLEY WOOLLEN CLOTH WORKS .....	Mr. OLIVER HALL.

# CO-OPERATIVE WHOLESALE SOCIETY

## LIMITED.

### NUMBER OF EMPLOYÉS, AUGUST, 1887.

Manchester—General, Drapery, Boot & Shoe, & Furnishing Offices	118
"    Cashier's Office .....	10
"    Grocery Department .....	96
"    Drapery .....	39
"    Woollen Cloth .....	57
"    Boot and Shoe .....	15
"    Furnishing .....	16
"    Shipping .....	3
"    Joinery .....	93
"    Dining Room Department .....	6
"    Other .....	13
Total Manchester.....	466
Newcastle Branch .....	138
"    Building Department .....	2
London Branch .....	99
"    Tea Department .....	124
Leeds Saleroom .....	2
Nottingham Saleroom .....	1
Bristol Dépôt.....	10
Liverpool Branch—Grocery and Shipping .....	8
Longton—Crockery Department .....	7
Irish Branches .....	46
Rouen Branch .....	4
Goole .....	9
Calais .....	2
Garston .....	2
New York Branch .....	5
Copenhagen .....	4
Hamburg .....	3
Crumpsall Biscuit Works .....	100
Leicester Shoe .....	776
Heckmondwike Shoe Works.....	150
Durham Soap Works.....	10
Batley Woollen Mill .....	74
Steamship "Pioneer" .....	14
"    "Cambrian" .....	13
"    "Unity" .....	15
"    "Progress" .....	14
"    "Federation" .....	18
Total.....	2116



# CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

*Registered Offices:* 1, BALLOON STREET, MANCHESTER.

*Branches:* WATERLOO STREET, NEWCASTLE-ON-TYNE, AND  
LEMAN STREET, LONDON, E.

## TRADE DEPARTMENT.

For the information of Societies and Companies not already purchasers from or members of this Society, we give below—(1) our requirements on opening new accounts; (2) particulars of trade terms; (3) terms and conditions of membership; and (4) a few of the advantages accruing from membership.

Any further information will gladly be given on application.

### (1) NEW ACCOUNTS.

Societies desiring to open accounts are requested to furnish us with a copy each of their registered rules and latest balance sheet.

If a balance sheet has not been prepared, then the following information is required, viz., the number of members; amount of paid-up share capital; whether credit is allowed, and if so, to what extent; the amount of business done, or expected to be done per week.

### (2) TRADE TERMS.

With the first order sufficient cash must be remitted to cover the estimated value of the goods ordered; afterwards payment must be made within seven days from date of invoice; all accounts are rendered strictly net.

Our business is conducted on these terms, with registered Co-operative Societies and Companies only.

Societies in process of formation and whose rules are not yet registered can be supplied with goods on payment of cash with each order.

### (3) TERMS AND CONDITIONS OF MEMBERSHIP.

The following extracts from our Rules contain the principal features in connection with membership:—

#### (a) ADMISSION OF MEMBERS.—(Extract from Rule 5.)

The members of this society shall consist of such co-operative societies or companies (registered under the Industrial and Provident Societies Act, 1876, or under the Companies Acts, with limited liability, or under any law of the country where they are situate, whereby they acquire the right of trading as a body corporate, with limited liability) as have been admitted by the general committee, and approved by a majority of delegates present at a general meeting of the society. An application for shares shall be made by a resolution of some general or committee meeting of the society or company making the application, contained in



writing and attested by the signatures of the secretary and three of its members; every society or company making an application for shares shall state the number of its members, and take up not less than one £5 share for every ten members, and agree to increase the number annually as its members increase, making the return of such increase at the time and in accordance with its return to the Registrar.

(b) CAPITAL—HOW PAID UP.—(Extract from Rule 10.)

The capital of this society shall be raised in shares of five pounds each, which shall be transferable only. Every society, on its admission, shall pay the sum of not less than one shilling on each share taken up. Each five pounds so paid shall constitute one fully paid-up share; but no dividend or interest shall be withdrawn by members until their shares are paid up. Any member may pay up shares in advance. After having received the consent of a special meeting, the whole or any part of the share capital may be called up by the general committee on giving notice to that effect.

(c) FORM OF APPLICATION FOR SHARES.

APPLICATION FOR SHARES.

*Folio*.....

*The*.....

*Co-operative Society Limited.*

TO THE DIRECTORS OF THE CO-OPERATIVE WHOLESALE  
SOCIETY LIMITED, 1, BALLOON STREET, MANCHESTER.

Gentlemen,

Whereas, by a Resolution of the .....  
Co-operative Society Limited, passed by the\* .....  
at a Meeting held on the ..... day of ..... it was  
resolved that the Society, which consists of ..... Members,  
agree to take up ..... Shares (being One Share for every Ten  
of our Members) in the Co-operative Wholesale Society Limited,  
and annually to increase our Shares at the time and in accord-  
ance with our return to the Registrar, and to accept such Shares  
on the terms and conditions specified in your Rules.

.....188  
Attested by ..... } Three Members.  
..... }  
..... }  
..... Secretary.

\* Members, Committee of Management, or Directors.

(4) ADVANTAGES ACCRUING FROM MEMBERSHIP.

- (a) The liability of each society member is limited to the amount of its shares.
- (b) Members of this Society receive double the rate of dividend on purchases to non-members.
- (c) Share capital receives interest after the rate of £5 per cent per annum.
- (d) Each society composing the "Wholesale" may nominate one representative for every 500 of its members to represent it at the General or Branch Quarterly Meetings, or other Special Meetings which may be convened from time to time, and thus have a direct influence and voice in the control and management of its affairs. The nomination and election of its officers for General and Branch Committees and Auditors are effected by means of nomination and voting papers, which are sent to all Shareholding Societies to be filled up.
- (e) A merely nominal payment secures membership, a deposit of 1s. per share upon application being only required; the dividend on purchases and interest on share capital being credited to share account until paid up.

We trust that those societies not already federated with the "Wholesale" will at once join, and thus secure the advantages to themselves and the co-operative movement generally which its extensive and varied operations are intended to confer.

# CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

## BUSINESS NOTICES.

ALL LETTERS TO BE ADDRESSED TO THE SOCIETY, AND NOT TO INDIVIDUALS.

WE would especially impress upon Societies' Managers and Secretaries the necessity of complying with the following regulations, in order to facilitate the despatch of Goods, to ensure promptitude in the answering and classification of letters, and to prevent disappointment.

### LETTERS.

All letters must be addressed to the Society, and not to individuals.

Addressed Envelopes are supplied at cost price.

Communications for the following Departments, and relating to the subjects named, should always be made on separate forms or sheets of paper, viz.:—

- (1) Bank and Cashier's Department.
- (2) Accountants' Department.
- (3) Grocery and Provision Department—Orders only.
- (4) „ „ „ Application for Samples only.
- (5) Drapery Department—Orders and Applications for Samples.
- (6) Boot and Shoe Department—Orders and Applications for Samples.
- (7) Woollen Cloth „ „ „ „
- (8) Furnishing Department—Orders and Applications for Samples.
- (9) Advices of Returns.
- (10) Claims, delays, complaints, &c., for all Departments.

Although each of the above classifications requires a separate form, they should all be enclosed under one cover, and addressed to the Society.

These classifications have therefore been adopted, and Societies are asked to assist by seeing that their communications are despatched in accordance therewith, as when subjects included in more than one of these divisions are dealt with on one form, much labour is involved in re-writing the portions required to be separated.

At the Central Office, in Manchester alone, upwards of 3,000 Letters and Orders are received daily. It is evident that to effectually deal with these communications some division into departments is absolutely necessary.



## ORDERS FOR GOODS.

*The name of the Society and the Station to which the Goods are to be forwarded should be written at the head of each order.*

Orders should contain the Price or Brand of each Article wanted.

Delays would often be prevented by noticing in which column in the Price Lists (Manchester, Newcastle, London, &c.) the Goods are quoted, and posting the Orders direct to the Central, or branches named, as the case requires.

As regards "Direct Quotations," notwithstanding that there are many instances where minimum quantities are fixed, orders are frequently received for less than the stipulated quantities. This necessitates correspondence, and in cases of urgency entails inconvenience to Societies, which would be obviated by carefully noticing the Price List when ordering.

It is desirable that the Forms we have specially prepared should be used in sending Orders.

1. Grocery, Drapery, Woollens, and Furnishing Department, price 10d.
2. Tailoring (Bespoke), with instructions for measurement, price 10d.
3. Boot and Shoe Department, price 10d.
4.     "     "     "     "     (Bespoke), with instructions for measurement,  
price 1s.

Books containing 50 Forms, with Duplicates, will be sent on application.

Orders for each Department should be made out on separate forms.

## CONSIGNMENT OF GOODS.

Whenever delays occur in the delivery of Goods, Societies will please communicate with the carrier at their end, in addition to informing us.

To prevent any misunderstanding as to who is responsible for the safe delivery of Goods, we would state that when Goods are Carriage Paid we undertake their safe delivery; but when the Carriage is not Paid, the Carrier is responsible to the Consignees, who, before taking delivery of any Goods, should carefully examine the same, and at once claim for any loss or damage sustained in transit.

## EMPTYES.

Empty packages should be returned carefully packed, and fully and correctly consigned.

Each package should have a *label or direction card attached, stating the contents, the name of Society forwarding them, and the name and address of their destination.*

Empties should be returned direct to the manufacturer from whom the Goods were sent. When returned to Manchester or the Branches, additional expense and trouble are incurred in re-consigning them to their proper destination.

A few manufacturers pay carriage on returned empties; where this is done Societies will consign carriage forward, in all other cases carriage should be paid. A list of firms who pay carriage, may be obtained on application at the Central Offices.

In all cases an advice giving full particulars of the empties returned (viz., the kind, the quantity, the numbers, the price charged, and reference to invoice where charged) should be immediately posted to us, as unless this is done our rule is not to allow credit for them.

We have a book of 50 forms, with duplicates, specially prepared for this purpose, price 9d., which Societies are recommended to use.



The importance of carrying out these instructions will be seen when Societies are informed that the Railway Companies seldom make deliveries of empties until they have a complete load, and under such circumstances it is almost impossible to ascertain from what Societies they have been received, unless full particulars are given.

In many cases Societies do not fully carry out these instructions, consequently we are continually receiving empty packages which we are not able to credit because we do not know from whom they have been returned. This is a loss which we are desirous Societies should not incur; we therefore point it out to them so that the necessary precautions may be taken to avoid it.

### GOODS CONSIGNED AS EMPTIES.

We cannot hold ourselves responsible for any Goods that may be returned consigned as empties, as any claim made on the Railway Companies for missing Goods under such circumstances would not be entertained.

### STATEMENTS OF TRADE ACCOUNTS.

#### WEEKLY STATEMENTS

Are sent out to all Societies doing business with us, showing Total of Goods Invoiced, Cash Received, and Allowances made during the week, and Balance, if any, at the week end.

These statements afford a great check on Societies' books, and Secretaries are requested to compare each one as received with their books, and to report to us particulars in case of any discrepancy.

#### QUARTERLY STATEMENTS

Are issued immediately after our Books are made up for the Quarter.

They are in form similar to the Weekly Statements, and must be returned, duly certified if correct, to our Auditors, who require them as an independent check as to the correctness of our accounts.

We rely upon Societies giving prompt attention to these statements, as the early issue of our Balance Sheets depends to an extent on their immediate return.

In case of any discrepancy, details should be at once given or applied for, but if correct, the Statement should be forthwith signed and returned to the Auditors, in the envelope sent out for that purpose.

### SHARE AND LOAN PASS BOOKS.

These should be sent to the Head Office (1, Balloon Street, Manchester) *every* Quarter, viz., in the First Week of March, June, September, and December, for the purpose of having the previous quarter's Interest and Dividend entered therein. Societies requiring information respecting the amount of their Share or Loan Capital are requested to send their Pass Books for the amount to be filled in, instead of sending for Statements.

When Shares are paid up the Share Book need not again be sent until a further allotment is made.

### SOCIETIES' BALANCE SHEETS.

We especially desire those Societies who have not already done so to send us a copy of their last Balance Sheet, stating on it the number of their Members; also, a copy of their rules.

# CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

## TRADE DEPARTMENT—CASH ARRANGEMENTS.

*We beg to call the attention of Societies to the arrangements specified below, which will give facility and security when making remittances to this Society:—*

1. All cash must be addressed to the society only, and not to individuals, nor to the committee or auditors.

2. CHEQUES and DRAFTS to be made payable to the CO-OPERATIVE WHOLESALE SOCIETY LIMITED. Post-office orders must be made payable to ABRAHAM GREENWOOD. Drafts drawn in favour of this society must be made payable on demand; other drafts when remitted to us must have reached maturity. All drafts, if possible, should be made payable either at London or Manchester.

3. Societies are respectfully requested, when drawing cheques in our favour, to do so in full, viz., Co-operative Wholesale Society Limited, without any abbreviation or variation whatever.

4. In forwarding half notes societies should state whether they are first or second halves; the latter half notes should be forwarded immediately on receipt of our acknowledgment of the first. Societies not receiving acknowledgment for first or second half notes in due course of post, will oblige by calling attention to the omission.

5. Remittances can be made by societies free of charge through any of the branches or correspondents of the Manchester and County Bank, London and County Bank, and the National Provincial Bank of England, lists of which are given on next and three following pages.

6. Through the Manchester and Liverpool District Bank or its branches, at a charge of 2s. per £100. For remittances through the Union Bank of Manchester, the Lancashire and Yorkshire Bank, or any of their branches, charges will be made known on application to the society.

7. Care should be taken to advise immediately when a remittance is made to us, stating the amount and the name and place of the bank or branches through which the remittance is made.

8. Remittances made through a bank in all cases should be done in the name of the society sending cash to us, and not in the name of a person.

9. All charges according to these arrangements for the remittance of cash will, in the first instance, be paid by this society, and afterwards debited to societies availing themselves of these facilities for paying cash to us.

10. Societies would greatly oblige, and thereby facilitate the business of this society, if they will, when advising cash remittances, or any matter relating to payment of cash, do so on a separate sheet of paper.

11. LOANS, WITHDRAWAL OF.—Societies, when requiring to withdraw their loans, are respectfully requested to *apply to the Head Office, Manchester*, for an official form, which is provided for and supplied to societies for the purpose of enabling them to withdraw loans and to state definitely the amount of loan they wish to withdraw. Societies will please note this special request.



# LIST OF BRANCHES AND CORRESPONDENTS

## OF THE

# MANCHESTER AND COUNTY BANK,

THROUGH WHICH CASH CAN BE REMITTED FREE OF CHARGE.

*When depositing, instructions should be given to the Bankers as follows: "To be placed to Credit of Co-operative Wholesale Society Limited, in account with the Manchester and County Bank at Manchester."*

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APPLEBY .....	Cumberland Union Bank.
Ashton-under-Lyne .....	Branch of the Manchester and County Bank
Aspatria .....	Cumberland Union Bank.
BACUP .....	Branch of the Manchester and County Bank.
Barrow-in-Furness .....	Cumberland Union Bank.
Birmingham .....	Birmingham Joint-stock Bank.
Blackburn .....	Branch of the Manchester and County Bank.
Blackpool .....	Ditto ditto
Bolton .....	Ditto ditto
Bradford, Yorks .....	Bradford District Bank.
Brampton .....	Cumberland Union Bank.
Burnley .....	Branch of the Manchester and County Bank.
Bury .....	Bury Banking Company.
Buxton .....	Branch of the Manchester and County Bank.
CARLISLE .....	Cumberland Union Bank.
Castleford .....	Leeds and County Bank.
Chapel-en-le-Frith .....	Branch of the Manchester and County Bank.
Clitheroe .....	Ditto ditto
Cockermouth .....	Cumberland Union Bank.
Colne .....	Branch of the Manchester and County Bank.
Chesterfield .....	Sheffield Banking Company.
DARWEN .....	Branch of the Manchester and County Bank.
Denton .....	Ditto ditto
Derby .....	Derby Commercial Bank.
Dobercross .....	Branch of the Manchester and County Bank.
ECCLES .....	Branch of the Manchester and County Bank.
Egremont .....	Cumberland Union Bank.
GISBURNE .....	Branch of the Manchester and County Bank.
Goole .....	Leeds and County Bank.



HALIFAX ..... Halifax Joint-stock Bank.  
 Haltwhistle ..... Cumberland Union Bank.  
 Harrington ..... Ditto ditto  
 Hayfield ..... Branch of the Manchester and County Bank.  
 Hexham ..... Cumberland Union Bank.  
 Holborn Hill (Cumberland) .. Ditto ditto  
 Hollinwood ..... Branch of the Manchester and County Bank.  
 Huddersfield ..... Halifax Joint-stock Bank.

KEIGHLEY ..... Bradford District Bank.  
 Keswick ..... Cumberland Union Bank.  
 Kirkoswald ..... Ditto ditto

LEEDS ..... Leeds and County Bank.  
 Liverpool ..... Liverpool Union Bank.  
 Lytham ..... Branch of the Manchester and County Bank.  
 Longridge ..... Ditto ditto

MARYPORT ..... Cumberland Union Bank.  
 Mexbro' ..... Sheffield Banking Company.

NEWCHURCH ..... Branch of the Manchester and County Bank.  
 New Mills ..... Ditto ditto  
 Nelson ..... Ditto ditto

OLDHAM ..... Branch of the Manchester and County Bank.  
 Oswaldtwistle ..... Ditto ditto

PADIHAM ..... Branch of the Manchester and County Bank.  
 Penrith ..... Cumberland Union Bank.  
 Pontefract ..... Leeds and County Bank.  
 Preston ..... Branch of the Manchester and County Bank.

RAVENGLASS ..... Cumberland Union Bank.  
 Rawtenstall ..... Branch of the Manchester and County Bank.  
 Rochdale ..... Oldham Joint-stock Bank.  
 Rotherham ..... Sheffield Banking Company.

SHEFFIELD ..... Sheffield Banking Company.  
 Snaith ..... Leeds and County Bank.  
 Southport ..... Southport and West Lancashire Banking Co.  
 Sowerby Bridge ..... Halifax Joint-stock Bank.  
 Stalybridge ..... Branch of the Manchester and County Bank.  
 Stockport ..... Ditto ditto

TIDESWELL ..... Branch of the Manchester and County Bank.

ULVERSTON ..... Cumberland Union Bank.  
 Uppermill ..... Branch of the Manchester and County Bank.

WAKEFIELD ..... Leeds and County Bank.  
 Whaley Bridge ..... Branch of the Manchester and County Bank.  
 Whitehaven ..... Cumberland Union Bank.  
 Wigan ..... Branch of the Manchester and County Bank.  
 Withington ..... Ditto ditto  
 Wigton (Cumberland) ..... Cumberland Union Bank.  
 Workington ..... Ditto ditto

# LIST OF BRANCHES

## OF THE

# LONDON AND COUNTY BANK,

THROUGH WHICH CASH CAN BE REMITTED FREE OF CHARGE.

*When depositing, instructions should be given to the Bankers as follows:—*

*“To be placed to Credit of CO-OPERATIVE WHOLESALE SOCIETY LIMITED, in account with the London and County Bank at London.”*

Abingdon and Iisley.  
Aldershot.  
Andover.  
Arundel, Little Hampton, and Steyning.  
Ashford and Hythe.  
Aylesbury, Gt. Berkhamstead, and Thame.  
Banbury.  
Barnet.  
Basingstoke and Hartley Row.  
Battle and Robertsbridge.  
Beckenham.  
Bedford.  
Bishop's Stortford.  
Bognor.  
Braintree and Coggleshall.  
Brentford.  
Brentwood.  
Brighton.  
Do. “West End.”  
Bromley, Kent.  
Buckingham and Stony Stratford.  
Cambridge.  
Canterbury, Whitstable, and Herne Bay.  
Chatham.  
Chelmsford.  
Chertsey and Weybridge.  
Chichester.  
Colchester and Sudbury.  
Cowes, Isle of Wight.  
Cranbrook.  
Dartford, Erith, and Farnigham.  
Dorking and Leatherhead.  
Dover.  
Dunstable.  
Eastbourne.  
Epsom.  
Farnham.  
Faversham.  
Goldalming.  
Gravesend.  
Great Berkhamstead.  
Guildford.  
Halstead and Haverhill.  
Harrow.  
Hastings.  
Hawkhurst.  
Hertford.  
High Wycombe.  
Hitchin and Biggleswade.  
Horsham and Crawley.

Hove, Brighton.  
Hounslow.  
Hungerford.  
Huntingdon, St. Ives, and St. Neots.  
Kingston-on-Thames.  
Leighton Buzzard and Woburn.  
Lewes and Hailsham.  
Luton.  
Maidenhead.  
Maidstone, West Malling, and Wrotham.  
Maldon.  
Manningtree.  
Margate.  
Midhurst.  
Newbury.  
Newhaven.  
Newport, Isle of Wight.  
Oxford.  
Petersfield.  
Petworth and Pulboro'.  
Reading and Henley-on-Thames.  
Redhill.  
Reigate.  
Richmond.  
Rochester.  
Romford.  
Rye.  
Saffron Walden.  
St. Albans.  
St. Leonards.  
Sandwich.  
Sevenoaks.  
Sheerness.  
Sittingbourne.  
Slough.  
Surbiton.  
Tenterden.  
Tunbridge.  
Tunbridge Wells and Ticehurst.  
Uxbridge.  
Wallingford and Didcot.  
Wantage.  
Ware.  
Watford, Hemel Hempstead, and Rickmansworth.  
Westerham.  
Winchester.  
Windsor.  
Worthing.

# LIST OF BRANCHES OF THE NATIONAL PROVINCIAL BANK OF ENGLAND,

THROUGH WHICH CASH CAN BE REMITTED FREE OF CHARGE.

*When depositing, instructions should be given to the Bankers as follows:—"To be placed to Credit of Co-OPERATIVE WHOLESALE SOCIETY LIMITED, in account with the National Provincial Bank of England at Manchester."*

**HEAD OFFICE—112, BISHOPSGATE STREET, LONDON.**

ST. JAMES' BRANCH—212, Piccadilly.  
ST. MARYLEBONE BRANCH—53, Baker Street.

ISLINGTON BRANCH—218, Upper Street.  
LINCOLN'S INN BRANCH—Carey Street, W.C.

## BRANCHES:

Aberayron.	Darlington.	Llangefni, Anglesea.	Shaftesbury.
Abergavenny.	Dartmouth.	Long Sutton.	Sherborne.
Aberystwith.	Deal.	Lowestoft.	Shrewsbury.
Amlwich, Anglesea.	Denbigh.	Machynlleth.	Southampton.
Bala.	Devonport.	March.	South Molton.
Bangor.	Dolgelly.	Middlesborough.	Southsea.
Barnard Castle.	Dover.	Mold.	South Shields.
Barnstaple.	Dulverton.	Monmouth.	Spalding.
Bath.	Durham.	Narberth.	Stalbridge.
Beaumaris.	Dursley.	Newcastle, Emlyn.	Stockton-on-Tees.
Berkeley.	East Dereham, Norfolk.	Newcastle, Staffordshire.	Stoke, Staffordshire.
Bideford.	Exeter.	Newcastle-on-Tyne.	Stokesley.
Birmingham.	Folkstone.	Newport, I. of Wight.	Stone, Staffordshire
Bishop Auckland.	Gateshead.	Newport, Monmouth.	Sturminster.
Blandford.	Gloucester.	Newport, Salop.	Sunderland.
Boston.	Guisborough, Yorks.	Newtown.	Tamworth.
Bournemouth.	Hanley.	North Shields.	Teignmouth.
Brecon.	Hartlepool.	Norwich.	Tenby.
Bridgend.	Haverfordwest.	Okehampton.	Tiverton.
Bristol.	Hay.	Pembroke.	Torquay.
Brixham.	Hereford.	Peterborough.	Torrington.
Bromyard.	Holyhead.	Plymouth.	Totnes.
Builth.	Honiton.	Poole.	Tunstall.
Burton-on-Trent.	Ilfracombe.	Portmadoc.	Wareham.
Bury St. Edmunds.	Ipswich.	Portsea, for Ports-	Wem, Salop.
Bute Docks, Cardiff.	Lampeter.	mouth.	West Hartlepool.
Cardiff.	Landport.	Pwllheli.	Whitby.
Cardigan.	Ledbury.	Ramsgate.	Whitchurch, Salop.
Carmarthen.	Leeds.	Redcar.	Wimborne.
Cheltenham.	Leicester.	Ringwood, Hants.	Wisbeach.
Chester.	Leominster.	Ross.	Worcester.
Chipping Sodbury.	Lichfield.	Rugby.	Wotton-under-Edge.
Clifton.	Liverpool.	Rugeley.	Wrexham.
Conway.	Llandovery.	Ryde.	Yarmouth.
Cowbridge.	Llandudno.	Salisbury.	York.
Crickhowell.			

## SUB-BRANCHES:

Bethesda Sub-Branch to Bangor.  
Credition do. to Exeter.

Loffhouse Sub-Branch to Guisborough.  
Menai Bridge do. to Bangor.

Pembroke Sub-Branch to Tenby.

*The following is a list of Manchester Banks. Cheques on any of these Banks and also on any Branch of the Banks marked thus \* are to be classed as Manchester Cheques.*

\*Union Bank of Manchester.  
\*Cunliffes, Brooks, and Co.  
\*Lancashire & Yorkshire Bank.  
\*Manchester & Salford Bank.  
\*Manchester & County Bank.  
\*M'chester & Liverpool District Bank.

\*M'chester Joint-stock Bank.  
Consolidated Bank.  
Adelphi Bank.  
Corytons Exchange Bank.  
Sewell and Nephew.  
Lomas Jackson and Co.

Thomas Nash and Sons.  
Jno. Stuart and Co.  
National Provincial Bank of  
England, M'chester Branch.  
Bank of England, Manchester  
Branch.



# CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

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## BANK DEPARTMENT.

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### *CENTRAL OFFICES:*

1, BALLOON STREET, MANCHESTER.

### *BRANCHES:*

WATERLOO STREET, NEWCASTLE-ON-TYNE.

LEMAN STREET, LONDON, E.

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## CURRENT ACCOUNTS

Opened on the plan usually adopted by other Bankers.

Deposits received for fixed periods, according to arrangements.

Customers keeping accounts with the Bank may have moneys paid to their credit free of charge, at the Head Offices, 1, Balloon Street, Manchester, and at the Branches, Waterloo Street, Newcastle-on-Tyne, and Hooper Square, Leman Street, Whitechapel, London, E.

Correspondents: The Pioneers' Society, Toad Lane, Rochdale; The Industrial Society, School Street, Over Darwen; The Co-operative Society, High Street, Leicester.

Correspondents of the following Banks: Manchester and County Bank, London and County Bank, National Provincial Bank of England, Manchester and Liverpool District Bank.

## DEPOSIT ACCOUNTS.

Sums of £10 and upwards received from persons not otherwise customers, at seven days' notice, or for fixed periods, as may be agreed upon, reference being had to the state of the money market.

Cheques cannot be drawn against Deposit Accounts, nor will Depositors be entitled to any of the usual Banking facilities of a Current Account.

## ON BANKING AND ITS UTILITY.

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**A** BANK is defined to be an institution for the transfer of debts; and a banker, one who acts as broker between two principals, but differing in one important detail from an ordinary broker in this respect.

For instance, in Liverpool or London the broker finds a buyer for the cotton or tea, as the case may be, for the merchants or manufacturers; there his action ends; not so the banker, he does one thing more, he guarantees the solvency of the borrower whom he finds for the depositor; the banker chooses who shall borrow or buy money, and not the depositor.

The banker undertakes to receive from his customer all moneys, bills of exchange due, and cheques for collection, crediting the account kept in the customer's name with the respective amounts. By the medium of a banker a great saving of labour can be effected. Instead of each merchant, tradesman, or other person being obliged to send clerks or messengers in all directions over the country, carrying bills, cheques, and money about with them, they send all these notes and bills to the banker. The banker who has a large number of customers of this kind then proceeds to assort these bills and cheques, according to the different directions where they are payable, so that one messenger can collect hundreds of cheques in one journey, which otherwise would take one hundred messengers and journeys.

The sums so collected having been credited to customers' accounts, the banker undertakes to pay all cheques drawn on him or bills made payable at his house. For these services the banker pays himself by a commission agreed upon or a certain credit balance of the customer for which no interest is allowed, but which the banker may use at interest, so as to compensate him for the trouble and labour required to conduct the account.

The relation of the banker to his customer. We take from the work on "Elementary Banking," by Henry Dunning Macleod. He says:—"The essential feature of a 'banker' is, that when his customers place money with him it becomes his absolute property to deal with as he pleases, and he is in no way accountable to them for the purposes he applies the money to. The customers of a 'banker' cede to him absolutely the property in their money; and receive in exchange for it the right to have an equal sum paid back on demand. A banker, therefore, is not the trustee of his customers, but simply their debtor."

And this was always regarded as the essential feature of a "banker." Marquardus says:—"And by 'banking' is meant a certain species of trading in money, under the sanction of public authority, in which money is placed with bankers (who are also called cashiers and depositaries of money), for the security of creditors and the convenience of debtors, in such a way that the property in the money passes to them; but always on this condition understood, that anyone who places his money with them may have it back whenever he pleases."

Thus a "banker" always buys money with his credit; and, moreover, when he buys commercial debts, he always does it with his credit also, and not with cash. This is the essential distinction between a "banker" and a bill discounter, that a banker always buys bills with his credit, and a bill discounter with cash. Hence when a bill discounter has invested all the cash in his possession, either his own or what others have placed with him, in this way, he is at the end of his resources.



But a banker always buys commercial debts with his own credit, or with his promise to pay; and experience shows that his credit may exceed several times the cash in his possession. How many times his credit may safely exceed his cash may differ in different localities, and in different methods of doing business; but at all events it may do so several times.

Thus the essence of the business of banking is to create credit. This credit is, of course, made payable in money, but in practice it is very rarely actually paid in money. A mutual release of debts is absolutely equivalent to a reciprocal payment of debts, and by the modern banking system the enormously greater proportion of banking credit is extinguished by mutual releases of debts.

Banking affords many advantages and facilities for business, the chief of which are the following: It provides places of safety for the keeping of money. It removes the difficulty and inconvenience of carrying cash from place to place at the risk of robbery. It effects a great saving of time and consequently of expense to business people, who would otherwise but for banking arrangements have to send their own clerks to all parts of a town or into the country to demand payment of their bills of exchange. It affords an efficient safeguard against speculation. It presents means of making payments in distant parts of the country without the transmission of money.

In commencing a banking account the customer pays in as a commencement a sum, say, of from £100 to £5,000; his signature is registered as a specimen of that which he will use when drawing cheques on the bank. He is then furnished with a "cheque book," containing 30 or 100 printed cheques, which can be used for his drawing on account; he also receives a "pass book," which passes between him and the banker, and contains a copy of the banker's ledger account. This pass book the customer uses for the purpose of seeing (either daily or weekly, &c.) whether his own account agrees with that of his banker.

When a customer has occasion to pay an account or draw cash for his own use, he has only to fill up and sign a cheque and his banker will pay it. He transfers to his banker the trouble of paying all his acceptances, all bills of exchange, and collects the cash for cheques paid to him.

The banker makes advances in a variety of ways to persons who want to borrow and can give approved security or can satisfy the lender as to his trustworthiness.

A customer can both refer to his banker for testimony of his own respectability and obtain through him information as to the credit and stability of other parties.

The Wholesale Society allows interest for money placed in its hands according to its value from time to time.

We are prepared to open current accounts with any society located at places named in the lists of banks and their branches given in pages 11, 12, 13, and 14.

The profits made by the Wholesale banking department are apportioned in this wise:—

1st. The customer who has a credit balance with the bank will share in the profits on the earnings in proportion to the amount, varying from a quarter to one per cent over the interest the customer would get from the usual terms allowed by the ordinary banker.

2nd. The debit customers share in the profit too in a similar way to the credit customer, on the amount of interest which is paid on the debit balances of their account, but only to half the profit of the credit customer.

3rd. A customer may be a credit and debit customer in the same quarter, and would receive profits both as borrower and lender.



# CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

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## GROCERY AND PROVISION DEPARTMENTS.

CENTRAL DEPÔT:

**1, BALLOON STREET, MANCHESTER.**

NEWCASTLE BRANCH:

**WATERLOO STREET, NEWCASTLE-ON-TYNE.**

LONDON BRANCH:

**LEMAN STREET, LONDON, E.**

A Complete Price List of the goods dealt in is issued weekly, the prices being fixed for the day of issue only. These Weekly Lists, which are sent to Co-operative Societies with whom we do business, contain reports and opinions as to the state of the markets, as regards some of the principal articles.

The reports are intended for, and calculated to be of service to, Committees and Managers of Societies, in pointing out the tendency of the markets, and when to buy to advantage.

The following is a brief *résumé* of the chief commodities, and how the "Wholesale" is circumstanced in relation thereto:—

### BUTTER AND EGGS—IRISH.

The arrangements in force for conducting this portion of the business are remarkably well adapted for supplying the same on the most favourable terms.

There are seven buyers, stationed respectively at Cork, Limerick, Tipperary, Kilmallock, Waterford, Tralee, and Armagh. These buyers are gentlemen of the first experience in the trade, and are under the immediate and direct control of the Society—not being merely employed as agents or buyers on commission.

The buyers, although taking up their residences at the places named, attend all the best and noted markets within a radius of twenty or thirty miles, and thus it will be seen that the area covered by their operations embraces a great proportion of the south of Ireland, and some of the most fertile districts of that country.

This Society is by far the most extensive purchaser and shipper of Irish Butter.

### BUTTER AND EGGS—DANISH.

The same remarks may be made in this respect as in the case of Irish Butter and Eggs. We have our own buyer stationed at Copenhagen, and he purchases direct from farmers who are considered the best producers in both Denmark and Sweden, and contracts with them for a weekly supply of all they make.

Before shipment, all goods are carefully examined by our representative.

Societies should encourage this Branch by giving us weekly orders for shipment direct, and thus save the cost of warehousing and of carriage from Manchester.

### BUTTER—KIEL, AND GERMAN EGGS.

Our arrangements for the purchase of these are similar to those at Copenhagen.

Our own buyer is located at Hamburg, and buys first-hand from the farmers and producers.

Our ready-money system of doing business commands the best terms, and enables us to do a very extensive and satisfactory trade in these articles.

### BUTTER AND EGGS—FRENCH.

Supplies of these are obtained fresh weekly, and are carefully selected for the Society, by competent and experienced men, from the best dairies and districts in France.

### AMERICAN BUTTER, CHEESE, BACON, HAMS, LARD, FLOUR, APPLES, &c., &c.—NEW YORK BRANCH.

Two buyers are located at New York, whose duty it is to purchase and export the articles sold by the Society which are grown and manufactured in the United States and Canada.

The business done by the Society, and the Capital always at its command, enables its representatives to enter the markets in an independent manner, and places them in a pre-eminent position to exact terms of the first order. These conditions, and the consequent absence of the intermediate dealers, qualify the Society to transfer the goods from where they are produced to the consumer with the least possible addition to the cost.

### CHESHIRE CHEESE.

The Society's buyers visit the best dairies and farms in Cheshire where this is made, and purchase it from the farmers on the spot.

### YEAST.

This is imported by the Society direct from the best distillers at Schiedam, Hamburg, and France. It is received in the port of Hull twice in each week—*i.e.*, Mondays and Thursdays—and distributed from there to the Society's customers.

### SUGAR.

The large purchases which the Society is able to make, place it in the best position for securing the utmost advantages from the refiners.

In addition to this, the Society's own buyers are in the centre of operations in Liverpool, London, Greenock, and New York, and are able to obtain information at first hand.

There is a telephone connecting its Liverpool offices with the Central establishment at Manchester, and the buyer in Liverpool is thus in constant telephonic



communication with the Central buyer at Manchester, who, being in receipt of the latest and most reliable reports, is enabled to decide which is the most favourable time for making purchases.

Demeraras and other Raws are sampled on arrival, and the most suitable lots selected.

### FLOUR, GRAIN, &c.

The finest brands of Hungarian Flours are bought direct from the millers in Hungary. German and Danish Flours are also bought direct, and are imported by us in our own steamers. The two latter brands are purchased by our own buyers, situated at Hamburg and Copenhagen respectively.

The Society's buyers in New York make very extensive purchases of Flour, direct from the millers, in both the United States and Canada.

Grain is bought in large quantities, "to arrive," and Meal of all kinds from the mills direct.

### DRIED FRUIT.

Our Dried Fruit buyer goes annually to Greece and Turkey at the season when the fruits are being gathered, and visits the vineyards where the fruits are drying, in order to select the Samples of Currants, Sultanas, and Figs most suitable for Co-operative Societies. These are bought direct from the producer, thereby saving the middlemen's profits, and getting a better selection than could otherwise be obtained.

### POTATOES, ONIONS, APPLES, &c.

There is a special buyer for these goods, who travels over the districts known to produce the best sorts, and they are bought direct from the farmers when it can be done with advantage.

Purchases to a very large extent are also made in France, Belgium, and Germany, and the goods are imported to Goole and Garston by the Society's own steamers, which ply regularly between Calais and Goole and Hamburg and Goole on the East, and Rouen and Garston on the West Coast.

### BISCUITS, SWEETS, AND DRY SOAPS.

These goods are manufactured by the Society at their Works, Crumpsall, near Manchester. When impartially judged, the quality compares most favourably indeed with similar articles made by other houses of older standing, and devoted to the special manufacture for a long period.

### SUNDRIES.

Some of the other articles in which the Society deals largely are—Preserved Meats, Beef, Mutton, Fish, Salmon, Sardines, and Lobsters.

Preserves and Marmalades; Rice, Sago, and Tapioca; Soaps, Soda, Seeds, Starch, and Blues; Syrup and Treacle; Tobacco and Snuffs.

Mustard, Matches, Ginger, Pepper, and Spices; Eggs; Cocoas and Chicory; Candles.

Candied Peels; Burning Oils, Hair and Scented Oils; Black Lead, Blacking, Baking Powder, Oatmeal, Paper and Paper Bags, Patent Medicines, Pickles, Sauces, &c., &c., &c.



# CO-OPERATIVE WHOLESALE SOCIETY

## LIMITED.

Tea, Coffee, and Cocoa Department,

LEMAN STREET, LONDON, E.

We have a buyer on the London Market, whose exclusive duty it is to select and purchase Teas, Coffees, and Cocoas direct from the Importers.

The excellence of this arrangement, whether viewed from an economical point, or from that of enabling us to efficiently supply Societies with all the numerous varieties and qualities they may desire, is too apparent to need illustration.

Our unlimited command of money and unequalled organisation places us in a position for doing this trade superior to that of any other house.

### ASSAM AND OTHER INDIAN TEAS.

These are made a special study. Year by year they are increasing in favour with the public; and their greater pungency and strength, as compared with China Teas, is likely to make them still further popular.

### CHINA TEAS.

Many connoisseurs in Tea are to be found who still enthusiastically champion the merits of these growths. They contend that if they lack the strength and other features of Indian Teas, they possess a peculiarly delicate flavour that to the educated palate is exquisitely grateful.

### CEYLON TEAS.

The most enterprising of the planters in the Island of Ceylon have turned their attention to growing Tea on their estates, with the most gratifying results.

The quality produced supplies a need that has been most urgently felt, viz., Tea possessing the flavour of China Tea without its weakness, and the fulness of Indian Tea without its astringency.

These Teas are rapidly increasing in favour, and the consumption of 1887 shows a very large excess over 1886.

### RED LEAF CONGOUS.

The better grades are decidedly the best Teas we have seen for some years.

SEU MOOS showed marked improvement, and were eagerly competed for at higher rates than have ruled of late years.

SUEY KUTS do not compare well with last year's crop.

SARYUNES, with one or two exceptions, show no improvement.

PADRAES have been in but short supply, the bulk of these Teas having been shipped to the Colonies.

PANYONGS.—Some of these sorts show good quality, full flavoured and well made.

PAKLUMS.—After the wonderfully fine Teas of last season, this crop is most disappointing; in fact not a single really fine Tea has been seen.

The quantity shipped is expected to be about nine millions less than last year.

### BLACK LEAF CONGOUS.

HANKOW and SHANGHAI crops are inferior to last year's.

KEEMUNS and KINTUCKS stand as the most attractive Teas of the season, being strong in cup, with red infused leaf.

NINGCHOWS.—There were very few fine Teas; the natives, expecting low prices, mixed the first and second packs together as the head chops.

OOPACKS are much inferior.

OONFAAS and TOWYUENS.—The former were much inferior to last year, whereas the latter are Teas with strength though the leaf continues rough.

SECOND CROP TEAS.—Owing to the very heavy rains in the Tea districts at the time, they were more or less rain-damaged, and good sound chops are the exception.

The DRY LEAF again shows less care in the manufacture.

The quantity shipped is expected to be about thirteen or fourteen million pounds less than last year.

### SCENTED TEAS.

The quality of the crop is a fair average one, with a large increase in Black Glazy kinds.

More attention has been given to make and appearance, while the scent shows a slight falling off.

The consumption of these is decreasing, and their purpose, which was to give pungency and grip to Red and Black Leafs, is now being supplied by Assams.

In the great manufacturing centres, where Scented Teas at one time were used almost alone, they are now almost discarded.

### GREEN TEAS.

These are used in very small quantities in proportion to what they once were, and the consumption is still decreasing.

The Adulteration Act seems to have created a prejudice against this class of Tea. The prevalence of artificial colouring having become more widely known, consumers are now very suspicious of them.

The old notion, also, that Green Teas are especially adapted for removing the effects of fatigue, is fast dying away.

### BLENDED TEAS.

The art of blending is now carried to a high pitch of perfection, and to work it successfully requires not only a knowledge of the true affinities of the various growths of India, China, and Ceylon, acquired by a long apprenticeship to tea tasting, but ample capital, large premises, suitable machinery, and a competent staff of well-instructed employés. These have been provided for this section of our Tea and Coffee business.

Extreme care is taken to suit all tastes and districts, and everything that can be thought of to make our arrangements, if possible, still more perfect, will be done.



## BULK MIXED.

These are packed in cads, half chests, and chests. The saving of capital and labour, the greater efficiency and satisfaction resulting from scientific blending, and the numerous grades supplied by us, is causing a largely-increased demand, and is making them very popular.

## CHINA PACKET TEAS.

In addition to the excellence of the blending, we are making extra efforts to turn our packets out of a design and appearance that shall command attention and attract the consumer.

Everyone will admit the superiority in appearance of a handsome packet to the ordinary parcel turned out by the shopman when the Tea is weighed over the counter.

By careful attention to the economy of labour, we are able to supply packets, in large and beautiful variety, at a cost less even than would be incurred if made up in the ordinary way in the Store.

## INDIAN PACKET TEAS.

As we have mentioned before, Indian Teas are rapidly increasing in public favour, and, instead of being mixed with China Teas, are now being extensively used by themselves, so to meet these requirements we have introduced two Indian Packets, one a pure Souchong, and the other a pure Pekoe blend.

## CEYLON PACKET TEA.

As these Teas are rapidly and deservedly growing in public favour, on account of their strong, rich, and delicious flavour, we have introduced a Ceylon Packet Tea. We warn our readers that a great many mixtures are offered as Pure Ceylon Teas in leaden packets, and represented as being imported direct from Ceylon in this form. Teas offered in such packets should be avoided, as the finest Ceylon Teas are never so imported.

## COFFEES.

The EAST INDIA CROP during the past season was a good one, and better than last year—quantity 2,000 tons less.

The production of CEYLON again shows a falling off, showing about 2,000 tons less than last year, and the quality good.

COSTA RICA CROPS large, and quality above average.

No extension is going on in INDIA.

RIO AND SANTOS CROP good; quality only fair, and is small in the berry.

From JAVA only a fair crop is expected; quantity smaller than last year, quality not so good.

## RAW COFFEES.

Our arrangements for the supply of all kinds in use in the home market are as efficient as they can be possibly made.

Samples, both in the raw and roasted state, are sent with all quotations.

## ROASTED COFFEES.

We now have roasting machinery both in London and Manchester, fitted with all the latest improvements.

These enable us to supply the freshly-roasted article in the most expeditious manner; and great care is taken to finish off the berry to suit the particular requirements of customers.



## PACKED COFFEE.

Great quantities of rubbish have been, and are being, sold under different fancy names. The extraordinary proportions the demand for these articles has assumed has led the Government to impose a special tax on all mixtures, so as to compensate for the loss of revenue on Coffee caused by their consumption.

This will now put the honest trader on a fair footing; and, with Coffee so cheap, there is nothing to prevent a really good and pure article being sold in canisters, to the advantage of the customer, and yet with a satisfactory profit to the retailer.

We therefore now sell Coffees of different grades and qualities, both pure and mixed with Chicory, at prices which will be sure to command a good sale.

Our excellent machinery, our economical arrangements, the large scale of our operations, and the well-known beneficial results of division of labour, will enable us to supply Societies cheaper and better than it is possible for them to do for themselves.

## COCOA.

In order to give societies the advantage of getting their supplies at the lowest possible cost, we have commenced the production of the following. The greatest care is taken in the manufacture, which is under the personal supervision of an experienced expert. The finest growths of Cocos only are used, and our Works have been fitted up with the most modern machinery. Thus, aided by the judicious blending and the employment of skilled workmen, we are able to make the various kinds of Cocos mentioned below in such a manner as cannot be excelled, and which on trial will be found delicious and agreeable to the most delicate palate.

## PURE COCOA ESSENCE.

This, the perfection of pure Cocoa, is obtained by the greatest care being exercised in the manufacture, almost all the excessive fatty matter being removed, thus rendering it much more palatable. Being scientifically prepared, it is by this process rendered perfectly soluble; thus, the fine aroma of the Cocoa is preserved—its chief characteristic being great solubility, and is the only kind that can be taken by persons of a weak digestion. More heat-giving and flesh-forming properties than any other Cocoa or mixed preparation.

## PREPARED BREAKFAST COCOAS,

Made from the finest growths of Trinidad and other well-known Cocoa Beans. Prepared scientifically with a number of highly-nutritious substances, which on trial cannot fail to give the greatest satisfaction.

## HOMŒOPATHIC COCOAS.

## PEARL COCOAS.

These are made to meet the wants of the masses, with whom the consumption is annually very largely increasing. Being manufactured by ourselves, enables us to produce a much more excellent quality at a lower price than is otherwise obtainable, and which will meet the wants of those who are unable or unwilling to purchase Cocos of a much higher price.

The following are also made by us in all qualities:—**SOLUBLE FLAKE**, **GENUINE FLAKED NIBS**, **FINEST TRINIDAD ROCK**, **COCOA NIBS**, and all other kinds.

*Speciality:* **ROCK CHOCOLATE**, warranted Cocoa and Sugar only.

CO-OPERATIVE WHOLESALE SOCIETY  
 LIMITED,  
 MANUFACTURERS  
 OF  
 BISCUITS, SWEETS, AND DRY SOAP,  
 AT  
 CRUMPSALL WORKS.

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SALEROOMS AND WAREHOUSES:

BALLOON STREET, MANCHESTER; WATERLOO STREET,  
 NEWCASTLE-ON-TYNE; AND LEMAN STREET, LONDON, E.;

*WHERE ALL ORDERS MUST BE SENT.*

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To supply some of the Retail Stores' requirements, this Society established these Works fifteen years ago. By the rules of the Society the custom of the private trader is refused, and none but Registered Co-operative Societies are supplied. The Retail Stores, members of the Wholesale Society, are the proprietors of these Works, and, as such, the exclusion of private trade is a regulation made by them. We have, therefore, a just claim upon the Stores that they should support their own Works, whilst we acknowledge that they have a claim upon us to supply a pure and serviceable article, as good and as cheap, of its kind and quality, as can be had elsewhere.

### THE BISCUITS

Are made of the purest materials, nearly all the flour used being of co-operative manufacture; the machinery employed is of the latest style and most perfect character; the article produced is such that we confidently invite comparison, and urgently solicit all Co-operative Societies to give these Biscuits a trial.

We are able to produce three tons of Biscuits per day.

## IN THE MAKING OF SWEETS

We boil the best of sugar (all cane); we employ the best skill; we use only vegetable colouring matter, all of which is perfectly harmless; and we can confidently challenge analysis. Our Sweets need but to be tried to be approved.

### LOZENGES.

Our machinery is of the newest and most approved construction for the making of Lozenges in all the varieties mostly in request. In the manufacture of Peppermint Lozenges, we are using Oil of Peppermint supplied by our New York Branch, and we find it to be much more agreeable and pleasant to the taste than any Peppermint we have previously been able to obtain in England. We trust our friends will give this new department a trial, and have no doubt the article produced will bear comparison with the productions of the best makers.

### “ WHEATSHEAF ” BAKING POWDER,

In 1oz. and 2oz. Packets,

Has been tested in practical use with that of the best makers—and with favourable results.

### C.W.S. “ WHEATSHEAF ” BLACK LEAD,

In 1oz. Oblong Blocks, and 1oz. and 2oz. Round Blocks.

We Block the very best of Lead, and our produce cannot be excelled in the brilliancy and polish it imparts.

### DRY SOAP.

In the manufacture of this article it is usual to introduce cheap ingredients which have no cleansing properties, and only serve to increase the bulk and the weight, thus catching the unwary by giving them for their money a large packet of small value. We can assure our friends that we use no ingredients which have not valuable detergent or cleansing properties, and our Dry Soap will bear comparison with that of the best makers. Our friends will find it to their own advantage to use the Co-operative Dry Soap.

### SOFT SOAP.

What is said above of Dry Soap is equally applicable in every way to this article.



# CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## DRAPERY DEPARTMENT.

CENTRAL SALEROOM AND WAREHOUSE:  
DANTZIC STREET, MANCHESTER.

NEWCASTLE BRANCH SALEROOM AND WAREHOUSE:  
WATERLOO STREET, NEWCASTLE-ON-TYNE.

LONDON BRANCH SALEROOM AND WAREHOUSE:  
LEMAN STREET, LONDON, E.

THE especial attention of Societies is called to the above Department, as we feel sure, if they will only give us a fair comparison, they will find we can do as well for them as any other house in the trade. The Stock consists of—

### HOSIERY

OF EVERY KIND AND MAKE.

Wools, Worsted and Yarns (by the best spinners), Linen and Paper Fronts and Collars, Cuffs; Kid, Wool, Lisle, and Silk Gloves; Wool, Union, and Oxford Shirts; Duck Jackets; Men's and Boys' Hats and Caps.

### HABERDASHERY AND SMALLWARES

OF EVERY DESCRIPTION AND MAKE.

Silk and Velvet Buttons, Trimmings, Ribbon Velvets, &c.

### FANCY GOODS.

Ladies' and Gents' Scarfs, Ribbons, Laces, Stays, Corsets, Umbrellas in Silk, Alpaca, Zanella.

### DRESS DEPARTMENT.

Black and Coloured Merinos, French Twills, Poplins, Satteens, Scotch and German Plaids, Black and Coloured Silks and Velvets.

Scotch and Yorkshire Shawls, Wool Handkerchiefs, Felt and other Skirts, &c.

Lace, Leno, and Harness Curtains and Blinds, Wool, Damask, &c.

### MANCHESTER DEPARTMENT.

This Department comprises every kind of Scotch, Irish, and Barnsley Linens; Bleached Calicoes, Sheets, and Sheetings; Oxford, Harvard, and other Cotton Shirtings; Silesias, and every class of Dyed and Printed Linings; Prints, Cretonnes, Damasks, Window Hollands, Table Covers, Toilet Quilts, Toilet Covers, &c., &c.

The Stocks are bought from the best manufacturers only, and the finish in all cases is carefully attended to. All Goods are sold under their correct quality and numbers, and the widths and lengths guaranteed. These facts should always be considered when comparing the "Wholesale's" prices with those of other firms.

### GREY DEPARTMENT.

Wigans, Mexicans, and Twills in various widths and qualities; Yorkshire, Lancashire, and Saxony Flannels; Bath, Bury, and Twill Blankets; Bleached and Grey Sheets; Alhambras of every kind and in all sizes; Union and Wool Shirtings, Linseys, Kerseys, Lambskins, Down Quilts, &c.

CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED.

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WOOLLEN DEPARTMENT,  
DANTZIC STREET, MANCHESTER.

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WOOLLENS.

IN this department there is always a fine selection of West of England and Yorkshire Fancies, Worsted Coatings, Meltons, Sataras, Diagonals, Superfines, and Doeskins, at all prices ; also all the newest designs in Scotch and Irish Suitings, Trouserings, and Coatings.

READY-MADES

In Men's, Youths', and Boys' Garments, of every description and price.

TRIMMINGS.

Black and Coloured Silesias, Striped Silesias and Sateens, in all colours and designs. Buckrams, Canvases, Jeans, Pocketings, Black and Coloured Italians and Serges, at all prices.

For choice quality and value this department cannot be beaten by any house in the trade, and merits the support of our customers.

CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED.

FURNISHING DEPARTMENT,  
HOLGATE STREET, MANCHESTER.

ILLUSTRATED CATALOGUE AND PRICE LIST  
SENT FREE OF CHARGE TO ANY SOCIETY ON APPLICATION.

THE STOCK IN THIS DEPARTMENT

Consists of Sideboards, Tables, Chairs, Stools, Wardrobes, Bookcases, Chiffoniers, Chests of Drawers, Toilet and Pier Glasses, Sofas, Couches, Bedsteads (in wood or iron), Hat Stands, &c.

HARDWARE DEPARTMENT.

Buckets, Saucepans, Kettles, Coal Scuttles, Fenders, Fire Irons, Shovels, Umbrella Stands, Stair Rods, Tin Washups, Breakfast Cans, Milk Cans, Lading Cans, Bread Tins, Dripping Tins, Bellows, Washing and Wringing Machines, Brushes, Cutlery, &c., &c.

CARPET DEPARTMENT.

Kidderminster, Brussels, Tapestry, and Hemp Carpets, Tapestry, Brussels, Wool, Hemp, and Berlin Stair, Cocoa Mats, Cocoa Matting, Twine Matting, Axminster, List, Beam, and Skin Rugs and Mats, Oil Cloth, Painted Back Cloths, Hessian Back Cloths, Linoleums, &c., &c.

FANCY DEPARTMENT.

Hair, Clothes, Tooth, and Nail Brushes, Combs, Satchels, School Bags, Travelling Bags, Albums, Watches, Alberts, Guards, Spectacles, &c., &c.

MACHINERY, SHOP FITTINGS, &c.

We also supply Messrs. Crossley Bros.' "Otto" Gas Engines, and all other kinds of Machinery and Shop Fittings required by Societies.



# CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## CROCKERY DEPARTMENT, STAFFORD STREET, LONGTON.

**O**UR Dépôt in the Potteries is stocked with a choice selection of goods of the best manufacture suitable for the requirements of societies. At the same time we beg to call your attention to the following advantages we possess over manufacturers:—

First.—We can supply crates of mixed goods of all kinds—EARTHENWARE, CHINA, JET, and ROCKINGHAM.

Secondly.—We can supply them promptly, which is what manufacturers cannot continuously do, as they are certain to run out of stock of some kind very often.

Thirdly.—We can supply very small quantities of each article—which, with the above-mentioned promptitude, will enable you to keep a very small stock, and place it within the power of the smallest store to keep crockery to advantage.

Fourthly.—By combining our resources of capital with the services of a buyer on the spot we are able to purchase goods from the best makers, and supply them on as good terms as can be got by dealing direct with the manufacturers, and in greater variety.

Fifthly.—In dealing direct there is generally a heavy charge for crates, which will be avoided, as we shall find crates and charge one shilling only for the hire, straw and packing being charged 4s. for fourteen-bar crates and upwards, and 3s. 6d. for twelve-bar crates and smaller.

We trust that these considerations will induce every society to add crockery to their other business; and as we keep a number of crates on hand ready packed, consisting of China, Earthenware, Rockingham, and Jet Teapots, &c., suitable for beginning in this branch of trade, we shall be pleased to forward one immediately to any society which will intimate their willingness to give it a trial. For assortment of crates, &c., see our Price List, free to any society on application.

N.B.—All orders to be sent direct to Longton.

## CO-OPERATIVE WHOLESALE SOCIETY

LIMITED.

## WEST END SHOE WORKS, LEICESTER.

SALEROOMS AND WAREHOUSES:

BALLOON STREET, MANCHESTER; WATERLOO STREET,

NEWCASTLE-ON-TYNE; AND LEMAN STREET, LONDON, E.

Orders must be addressed either to Central Office, or to the Branch Establishments at Newcastle or London, except for Bespoke, which should in all cases be sent direct to the Works.

**WE** make all kinds of Boots—Men's and Boys' Watertights, Nailed Shooting Boots, Light Shooting Boots; all styles in Open and Closed Tabbed Bals.; Spring Sides, Kip and Calf Goloshed; Derby and Oxford Shoes; Riveted, Wood-pegged, Hand and Machine Sewn, Fairstitched, and Standard Screwed.

In Ladies' and Girls' Goods we make Spring Sides, Button, Lace, and Mock Button, in all materials, including Seal, Levant, Calf, Glove and Glacé Kid, Grain, Cordovan, Glove, Hide, &c., &c.

We make a large variety in Children's Boots, including Lace, Button, Side Spring, and Slippers. Grain, Levant, Kid, and Seal; Rivet, Machine-Sewn, or Machine Sewn Pumps; we have now added Ladies' and Gents' Sewn Slipper and House Boots. Our representative, Mr. Bennett, carries samples of these.

The Goods advertised in our Price List do not fully represent all the kinds we make; we are constantly adding fresh samples to suit Societies' requirements.

In our Price List we have illustrated the leading numbers usually kept in stock. Societies can be supplied with any other kind by sending a sample of what they require.

Our goods are made of genuine material. Samples sent to us for competition often contain composition when it ought to be leather; and the leather is also sometimes of the cheapest description.

Our goods, generally speaking, taking quality into account, are as cheap as those supplied by any house in the trade.

*Bespoke or Measures.*—We make these for Societies when required, and every effort is made to supply them promptly.

*Mistakes and Misfits* would be avoided if Societies would follow our instructions for measurement; take a draft of the foot, and in all cases use our Order Books arranged especially for this department. These Books are 10d. each, and may be obtained at the Central or any of the Branches.

*Leather—Cut Soles.*—Societies can be supplied with these Goods for Repairing purposes in quantities to suit their trade. *Price List* and particulars on application.

CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED.

HECKMONDWIKE  
BOOT AND SHOE WORKS.

SALEROOMS AND WAREHOUSES :  
BALLOON STREET, MANCHESTER ;  
WATERLOO STREET, NEWCASTLE-ON-TYNE ;  
LEMAN STREET, LONDON, E.

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Orders must be addressed either to Central Office, or to the Branch Establishments  
at Newcastle or London.

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THESE Works having been enlarged considerably, we are now in a position to double our production, and we appeal to Societies to give us their support.

The Goods we make are MEN'S and YOUTHS' STRONG NAILED, suitable for miners, quarrymen, farm labourers, masons, joiners, railway servants, &c. We also make in MEN'S and BOYS' a quantity of MEDIUM STRENGTH with SMOOTH BOTTOMS, with nails driven up, suitable for a working boot in lighter occupations.

We also make WOMEN'S STRONG LACED MILL BOOTS. In the manufacture of our goods we pay special attention to the selection of material used for the inner sole, which is the foundation of a strong boot, and on which depends entirely the wear, and when re-soled and heeled gives the repairer a good foundation to work upon. This very important feature applies to the whole of the goods we make, from the lowest priced ones upwards.

We desire it to be fully understood that none of our manufactures contain paper or composition leather board, but solid leather; and therefore, if in some instances our prices are found to be somewhat higher than goods of similar appearance, you may rely upon it the difference of the price is in the quality.



# CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

SOAP MANUFACTURERS,  
AT THE  
SOAP WORKS, GILESGATE, DURHAM.

SALEROOMS AND WAREHOUSES :  
BALLOON STREET, MANCHESTER;  
WATERLOO STREET, NEWCASTLE-ON-TYNE;  
LEMAN STREET, LONDON, E ;  
AND 106, VICTORIA STREET, BRISTOL;  
Where all Orders must be sent.

THESE Works were established October, 1874, to enable the Society to supply its members with a pure article. We can, without fear of contradiction, say that the Soap supplied from these Works is equal to any supplied by the best manufacturers, combining all the qualities of a substantial cleaning agency, and being manufactured from the very best raw material.

We supply the following qualities :—

GOLDEN PALE		COLD WATER
FIRST     "		BEST EXTRA PALE
SECOND   "		X               "
XX       "		FINE           "
GOLDEN WINDSOR		BEST MOTTLED
PALE       "		SECOND       "
HONEY SOAP, 1lb., $\frac{1}{2}$ lb., and $\frac{1}{4}$ lb. Tablets.		
ALMOND   "	"   "	"   "

*For prices, see Society's Weekly Price List. Samples will be sent on application.*

We are convinced that a much larger trade might be done if societies would only give this Soap a fair trial. The Co-operative Society at Durham, since the opening of these Works in 1874, have obtained their supply from no other source, and it has given entire satisfaction to their members. We therefore ask societies to support their own production, instead of obtaining their supply from other makers, who have travellers ever on the road waiting upon store managers seeking to influence them to buy their soap, and not that of their own manufacture.

**CO-OPERATORS, SUPPORT CO-OPERATIVE PRODUCTION.**

CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED,  
WOOLLEN MANUFACTURERS,  
LIVINGSTONE MILLS,  
BATLEY, YORKSHIRE.

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SALEROOMS AND WAREHOUSES:  
1, BALLOON STREET, MANCHESTER;  
WATERLOO STREET, NEWCASTLE-ON-TYNE;  
AND LEMAN STREET, LONDON, E.

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THE above Mills are now in full working order, and we are happy to inform you that the goods produced have surpassed our expectations in every respect. We trust that Societies will be able to give us their full support in this undertaking, in order that we may make it a great success.

We can vouch for the quality of the goods, and are confident the value is unsurpassed by any manufacturer in the Kingdom.

We trust that Societies will inspect our stock before making their purchases elsewhere.

Patterns will be forwarded on application.

We shall be pleased to receive a sample order, which shall have our best attention.

## PRODUCTIVE SOCIETIES

FOR WHICH THE

CO-OPERATIVE WHOLESALE SOCIETY ARE AGENTS.

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### The Agricultural and Horticultural Association Limited.

Reliable Farm and Garden Seeds; special Manures for Fruit, Vegetable, and Garden Crops.

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### The Airedale Manufacturing Society Limited.

Manufacturers of Black Alpaca Lustres, Black Brilliantines, Black and Coloured French Twills, Mohair Glacés, Black and Coloured Persian, Russel and Cable Cords, Wool Serges, Black Orleans, Black and Coloured Italians, Black and Coloured Figures, Mottles, Mixtures, Stripes, &c., &c.

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### The Coventry Co-operative Watch Manufacturing Society Limited.

The Watches supplied by this Society we can well recommend as being of uniform good quality, and it engages to keep them in good going order for twelve months from date of purchase. We trust that individuals, through their societies, will give us their orders, so that we may do a larger trade in this department. Watches, from £2. 10s. to £25 each.

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### The Dudley Nail Manufacturing Society Limited.

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### The Dudley Productive Co-operative Society Limited.

Manufacturers of all kinds of Galvanised Goods, Buckets, Nails, &c.

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### The Eccles Industrial Manufacturing Society Limited.

Manufacturers of Toilet, Alhambra, and Damask Quilts, by hand and power; also Twill Sheetings, all of the best quality, and in tastily-arranged patterns.

Having repeatedly compared the Quilts produced by the Eccles Manufacturing Society with the Quilts made by other firms, we are thoroughly satisfied that those made by them are equal, and, when cost is considered, superior, to those sold by other makers. All Toilet and Honeycomb Quilts sold by the Co-operative Wholesale Society are made by the Eccles Manufacturing Society, and all members, when purchasing, should ask for the Eccles Quilts, and insist upon having them.



**The Hebden Bridge Fustian Manufacturing Society Limited.**

Manufacturers of Cords, Moles, Velveteens, Imperials, Diagonals, Satteens, Twills, &c., in every variety and colour; Fustian Clothing, ready-made and to order. Samples and prices on application.

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**The Heckmondwike Manufacturing Society Limited.**

Manufacturers of Carpets, Horse Cloths, Blankets, &c.

---

**The Lancashire and Yorkshire Co-operative Productive Society Limited.**

Manufacturers of Flannels, plain and coloured, of guaranteed purity and excellence of manufacture, combined with reasonable prices. Societies ordering sufficiently large may, if desired, have the goods finished to suit their special markets.

---

**The Leek Silk Twist Manufacturing Company Limited.**

---

**The Leicester Elastic Web Manufacturing Society Limited.**

---

**The Leicester 2nd Hosiery Manufacturing Society Limited.**

We are now their sole agents, and keep a stock of all classes of goods made by them.

---

**The Midland Nail Makers' Association Limited.**

---

**The Paisley Manufacturing Society Limited.**

Manufacturers of Saxony Wool Shawls and Plaids, in plain and fancy checks; Saxony Wool Handkerchiefs and Scarfs, Dress Tartans, and Twilled and Plain Wool Shirtings. A large variety of patterns to select from.

---

**The Rochdale Pioneers' Society Limited.**

Manufacturers of Tobacco, Snuffs, &c.

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**The Sheepshed Hosiery Manufacturing Society Limited.**

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**The Sheffield Co-operative Cutlery Manufacturing Society Limited.**

CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED.

REGULAR STEAM SERVICE  
BETWEEN  
GARSTON (LIVERPOOL) & ROUEN.

OFFICES:

CENTRAL: BALLOON STREET, MANCHESTER.

LIVERPOOL: VICTORIA BUILDINGS, VICTORIA STREET,

GARSTON: NEW DOCK. ROUEN: 2, RUE JEANNE D'ARC.

“PIONEER”

OR OTHER STEAMER DESPATCHED FORTNIGHTLY.

EXTRA STEAMERS TO SUIT THE REQUIREMENTS OF THE TRADE.

Goods carried at through rates, with quick despatch, between Liverpool Manchester, Birmingham, and North of England Towns, and Paris, Lyons, Beauvais, Lille, and North and East of France.

For Rates of Freight and other information, apply to the Society's offices, as above.

On the outward voyages from Garston, in addition to sundry goods, the shipments consist largely of caustic soda, bleaching powder, and other chemicals from Widnes and St. Helens district—machinery from Manchester and Bolton and neighbouring towns—American and East Indian cotton which has arrived at Liverpool and been ordered for shipment to Rouen, the principal seat of cotton industry in France. There are also considerable shipments of copper. On arrival of the goods at Garston they are taken directly alongside our steamers, in the railway wagons, and then by means of powerful hydraulic cranes they are transferred from the wagons to the hold of the steamers. By this means shippers may rely on the shipments being effected with prompt despatch, and we avoid the risk of damage which sometimes occurs when cartage is employed.

At Rouen the steamers are berthed in close proximity to the railway lines, so that goods can be landed from the steamers direct on to the railway wagons. Or when consignees order goods to be forwarded from Rouen by water, the river barges are loaded alongside the steamer, and these are towed by powerful steam tugs up the Seine to Paris. Providing no exceptional delay occurs, the transit up the river occupies little over two days.

On the return journey from Rouen the steamers' cargo principally consists of loaf sugar coming from Paris, also sugar in bags, chemicals, dye stuffs, flour, field seeds, metals, and besides there are sundry goods in cases, such as glassware, toys, haberdashery, and *articles de Paris*.

In fine weather the sea voyage between Garston and Rouen occupies about three days. No effort is spared to ensure the steamer being despatched punctually from each port on the appointed dates, and as by this means a regular service is maintained, we are favoured with a large traffic from general shippers.

# CO-OPERATIVE WHOLESALE SOCIETY

## LIMITED.

### GOOLE AND CALAIS LINE OF STEAMERS.

#### CENTRAL OFFICES:

1. Balloon Street, Manchester.

#### GOOLE OFFICES:

Co-operative Wholesale Society, Goole.

#### CALAIS OFFICES:

Co-operative Wholesale Society, 5, Rue du Paradis, Calais.

### WEEKLY SERVICE BETWEEN GOOLE & CALAIS.

The new powerful and fast steamship "CAMBRIAN," or other steamer, will (weather and other casualties permitting) sail regularly between Goole and Calais, leaving Goole every **Wednesday** and Calais every **Saturday**. This line is in direct communication at Goole with the L. & Y. and N.E. Railway Companies, whose wagons can be loaded direct from the steamers, thereby ensuring despatch with the least risk of damage to the goods carried by the line.

The Aire and Calder Navigation Company run their canal boats alongside the Company's steamers, so that all who prefer their goods carried by canal can have them loaded direct into the Aire and Calder Company's boats and *vice versa*.

At Calais the steamers are berthed near the Custom House and opposite the goods warehouse of the North of France Railway Company, where the goods can be stored waiting the arrival of the steamers.

The North of France Railway Company have a line of rails laid to the place where the steamers are berthed, so that goods entrusted to this line can be safely and quickly despatched to their destination. The Goole and Calais route is the best and cheapest between the great manufacturing centres of the North of England and those of the North of France; and shippers in those districts will find it to their advantage to give this line a trial.

Goods are carried at through rates from any part of the United Kingdom to the principal cities of France and the Continent.

For rates of freight and other information apply to the

Co-OPERATIVE WHOLESALE SOCIETY, 1, Balloon Street, Manchester;

Co-OPERATIVE WHOLESALE SOCIETY, Goole; or

Co-OPERATIVE WHOLESALE SOCIETY, 5, Rue du Paradis, Calais.



CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED.

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Goole and Hamburg Line of Steamers.

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CENTRAL OFFICES: 1, BALLOON STREET, MANCHESTER.

GOOLE OFFICES: CO-OPERATIVE WHOLESALE SOCIETY, GOOLE.

HAMBURG OFFICES: MR. W. ZODER, AGENT, 3, STEINHOF, HAMBURG.

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REGULAR SERVICE BETWEEN  
GOOLE AND HAMBURG.

The powerful and fast steamships "FEDERATION," "UNITY," and "PROGRESS," or other Steamers, will (weather and other casualties permitting) sail regularly between Goole and Hamburg,

LEAVING EACH PORT TWICE A WEEK.

*Extra Steamers to suit the requirements of the Trade.*

This line is in direct communication at Goole with the L. & Y. & N.E. Railway Companies, whose wagons can be loaded direct from the steamer, without the risk or expense of cartage. This is of great importance to shippers, as it ensures a quick delivery of their goods in a clean and undamaged condition.

The Aire and Calder Navigation Company run their canal boats alongside the Company's steamers, so that all who prefer their goods carried by canal can have them loaded direct into the Aire and Calder Company's boats, and *vice versa*.

At Hamburg the steamers are berthed alongside the warehouses of the Railway Company, where the goods can be stored waiting the arrival of the steamers.

GOODS ARE CARRIED AT THROUGH RATES

From any part of the United Kingdom to the principal cities of Germany and the Continent.

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*For Rates of Freight and other information apply to the CO-OPERATIVE WHOLESALE SOCIETY, 1, Balloon Street, Manchester; CO-OPERATIVE WHOLESALE SOCIETY, Goole; or Mr. W. ZODER, Agent, 3, Steinhof, Hamburg.*

## THE CO-OPERATIVE WHOLESALE

*Progress of the Society from its commencement,*

YEAR ENDING	£5 Shares taken up.	No. of Members belonging to our Shareholders.	CAPITAL.						Net Sales.
			Shares.	Loans and Deposits.	Trade and Bank Reserve Fund.	Insurance Fund.	Reserved Expenses.	Total.	
			£	£	£	£	£	£	£
Oct. 1864 (30 weeks) .....	....	18,337	2,455	In-	....	....	..	2,455	51,857
" 1865 .....	....	24,005	7,182	clud'd in	....	....	..	7,182	120,754
" 1866 .....	....	31,030	10,968	Shares.	82	....	..	11,050	175,489
Jan. 1868 (65 weeks) .....	....	59,349	11,276	14,355	682	....	..	26,313	331,744
" 1869 .....	....	74,737	14,888	16,059	1,115	....	..	32,062	412,240
" 1870 .....	....	79,245	16,556	22,822	1,280	....	..	40,658	507,217
" 1871 (53 weeks) .....	....	89,880	19,015	22,323	2,826	....	..	44,164	677,734
" 1872 .....	5,835	114,588	24,410	25,768	1,910	....	..	52,088	758,764
" 1873 .....	6,949	134,276	31,352	112,589	2,916	....	..	146,857	1,153,132
" 1874 .....	13,899	168,985	48,126	147,949	1,613	2,356	..	200,044	1,636,950
" 1875 .....	17,326	198,608	60,930	193,594	5,373	3,385	..	263,282	1,964,829
" 1876 .....	22,254	249,516	78,249	286,614	8,910	5,834	..	379,607	2,247,395
" 1877 (53 weeks) .....	24,717	276,522	94,590	299,287	12,631	10,843	634	417,985	2,697,366
" 1878 .....	24,979	274,649	103,091	287,536	14,554	12,556	788	418,525	2,827,052
" 1879 .....	28,206	305,161	117,657	291,939	16,245	15,127	1,146	442,114	2,705,625
Dec. 1879 (50 weeks) .....	30,688	331,625	130,615	321,670	25,240	15,710	1,095	494,330	2,645,331
" 1880 .....	33,663	361,523	146,061	361,805	38,422	17,905	1,661	565,854	3,339,681
" 1881 .....	34,351	367,973	156,052	386,824	16,037	18,644	2,489	530,046	3,574,095
" 1882 .....	38,648	404,006	171,940	416,832	20,757	19,729	2,945	632,203	4,038,238
" 1883 .....	41,783	433,151	186,692	455,879	20,447	21,949	6,214	691,181	4,546,889
" 1884 (53 weeks) .....	45,099	459,734	207,080	494,840	25,126	24,324	9,988	761,358	4,675,371
" 1885 .....	51,099	507,772	234,112	524,781	31,094	40,084	11,104	841,175	4,793,151
" 1886 .....	58,612	558,104	270,679	567,527	37,755	57,015	11,403	944,379	5,223,179
	....	....	....	....	....	....	..	....	5,1104,083

Dr.

## RESERVE FUND ACCOUNT FROM

	£
Transferred to Reserve Fund, as above .....	78,142
Bonus to Employés: Balances between Amounts Provided and actually Paid .....	311
Dividend on Bad Debts, previously written off .....	720
Unclaimed Shares and Cash .....	20
Profit on Sale of Strawberry Estate, Newcastle .....	1,953
" " Land, Liverpool .....	713
" " Land and Buildings, Rosedale .....	11

£81,870



## SOCIETY LIMITED.

in March, 1864, to December, 1886.

Comparison with corresponding period previous year.		DISTRIBUTIVE EXPENSES.			Net Profit.	Average Dividend paid per £.	Transferred to Reserve Fund.	Dates Departments and Branches were commenced.
Increase.	Rate.	Amnt.	Rate on Sales					
£		£	Per £.	Per £100.			£	
....	..	347	13	s. d. 13 4½	£	d. 1½	....	
....	..	906	13	15 0	1,858	3½	....	
54,735	45½	1,615	21	18 4½	2,310	3	234	Tipperary.
112,688	51½	3,135	22	18 10½	4,411	3	450	
124,063	43	3,338	17	16 2½	4,862	2½	416	Kilmallock.
94,977	23	4,644	21	18 3½	4,248	1½	542	Limerick.
159,379	30½	5,533	17	16 5	7,626	2½	1,620	
86,559	12½	6,853	23	18 0½	7,867	2½	1,036	Newcastle.
394,368	51½	12,811	28	22 2½	11,116	2½	1,243	Manchester Boot and Shoe, Crumpsall.
483,618	41½	21,147	3	25 10	14,233	2	922	{ Armagh, Manchester Drapery, Leicester, Hart-
327,379	20	28,436	38	28 11½	20,684	2	4,461	ford, Waterford, Clonmel.
282,566	14½	31,555	38	28 0½	26,750	2½	4,826	London, Tralee, Durham.
401,095	17½	42,436	38	31 5½	36,979	2½	4,925	Liverpool.
188,897	7½	43,169	38	30 6½	29,189	2	579	New York, Goole, Furnishing. S.S. purchased.
121,427*	4½*	43,093	38	31 10½	34,959	2½	5,970	Cork.
22,774	7½	41,309	38	31 2½	42,764	2½	8,060	{ Launch of Steamship "Pioneer." Rouen.
611,282	22½	47,153	38	28 2½	42,090	2½	10,651	Goole forwarding depôt.
234,414	7	51,306	38	28 8½	46,850	2½	7,672	Heckmondwike.
464,143	12½	57,340	38	28 4½	49,658	2½	3,416	Copenhagen. Purchase of S.S. "Cambrian."
508,651	12½	66,057	38	29 0½	47,885	2½	3,176	Tea and Coffee Department, London.
41,042	4½	70,343	38	30 1	54,491	2½	6,432	Purchase of s.s. "Marianne Briggs."
203,946	4½	74,305	38	31 0	77,630	3½	4,434	Hamburg. Bristol Depôt. Launch of "Progress."
430,028	8½	81,653	38	31 3½	83,328	3½	7,077	Longton Depôt. Launch of S.S. "Federation."
*D'crease.	..	738,534	38	28 10½	652,055	2½	78,142	

## COMMENCEMENT OF SOCIETY.

Cr.

	£
Lebanon Dinner: Opening Warehouse, Balloon Street .....	56
Land and Buildings Account Depreciation, Special .....	1,148
Fixtures " " " .....	852
Newcastle Formation Expenses .....	16
Insurance Fund .....	6,000
Investments Written off: Bank Department .....	18,259
" " Trade Department .....	10,660
Manchester Ship Canal .....	2,000
Donations, Subscriptions, &c. ....	7,803
21st Anniversary Commemoration Expenses .....	2,017
BALANCE:—	48,811
Reserve Fund, as per Capital Account, December 25, 1886. ....	33,059
	£81,870



**THE CO-OPERATIVE WHOLESALE  
DISTRIBUTIVE EXPENSES FOR**

SALES =	TOTALS.		MANCHESTER	
			GROCERY.	
	£4,779,721.		£2,571,435.	
	Amount.	Rate $\frac{\text{p}}{\text{£100.}}$	Amount.	Rate $\frac{\text{p}}{\text{£100.}}$
	£	d.	£	d.
Wages.....	32891'30	165'18	11435'25	106'71
Employés' Bonus .....	484'74	2'44	..	..
Auditors' Fees.....	240'00	1'20	129'00	1'20
"    Deputation Fees.....	9'60	'04	5'19	'05
"    Fares .....	45'00	'22	24'19	'22
"    Deputation Fares .....	13'93	'06	7'50	'07
Fees—General and Branch Committees....	668'85	3'37	252'60	2'35
"    Sub-Committees .....	392'82	1'97	91'05	'85
"    Finance Committee .....	74'12	'37	39'81	'37
"    Stocktakers .....	41'90	'22	4'62	'04
"    Scrutineers .....	4'00	'02	2'15	'02
"    Secretaries .....	89'50	'45	25'00	'23
"    Deputations .....	240'89	1'21	111'97	1'04
Mileages—General and Branch Committees	155'94	'78	48'70	'45
"    Sub-Committees .....	140'37	'70	17'96	'16
"    Finance Committee .....	15'72	'08	8'42	'07
"    Stocktakers .....	9'50	'04	'90	'01
"    Scrutineers .....	'77	'00	'44	'00
"    Deputations.....	21'06	'10	6'33	'06
Fares—General and Branch Committees..	551'61	2'77	186'33	1'70
"    Sub-Committees .....	230'00	1'15	34'56	'32
"    Finance Committee .....	4'94	'02	2'64	'02
"    Stocktakers .....	24'05	'12	1'97	'02
"    Scrutineers .....	1'59	'00	'88	'01
"    Deputations .....	295'03	1'48	127'77	1'18
Price Lists: Printing .....	921'39	4'63	434'51	4'05
"    Postage.....	244'48	1'23	133'55	1'24
Balance Sheets: Printing .....	282'25	1'41	150'73	1'40
Printing and Stationery .....	2958'93	14'88	1235'25	11'52
Periodicals .....	100'15	'50	54'70	'51
Travelling.....	2706'47	13'59	669'25	6'25
Telegrams.....	505'59	1'53	206'86	1'93
Stamps .....	2338'54	11'76	1342'16	12'53
Petty Cash .....	178'94	'89	101'08	'90
Advertisements .....	324'52	1'62	180'86	1'69
Rents, Rates, and Taxes .....	1864'84	9'37	408'59	3'81
Coals, Gas, and Water .....	1279'27	6'43	456'60	4'26
Oil, Waste, and Tallow .....	42'20	'21	16'84	'16
Repairs .....	2209'59	11'10	1094'20	10'21
Expenses—Quarterly Meeting .....	118'30	'59	66'20	'62
"    Conference.....	18'32	'09	10'54	'09
Legal Expenses .....	128'70	'65	78'17	'72
Employés' Picnic .....	55'25	'27	18'01	'17
Telephones .....	233'85	1'17	155'38	1'45
Annual and Diary .....	846'20	4'24	453'03	4'23
Dining-rooms .....	1189'85	5'98	529'70	4'94
Insurance—Fire and Guarantee .....	809'80	4'06	156'74	1'46
Depreciation: Land .....	807'64	4'06	316'09	2'95
"    Buildings.....	4028'20	20'22	1291'78	12'06
"    Fixtures .....	1956'85	9'82	672'36	6'28
Interest .....	19059'66	95'70	6979'25	65'14
	81652'01	409'99	29777'66	277'72

## SOCIETY LIMITED.

THE YEAR ENDING DEC. 25TH, 1886.

## M A N C H E S T E R .

DRAPERY.		WOOLLENS.		BOOT AND SHOE.		FURNISHING.	
£195,139.		£22,173.		£121,432.		£62,340.	
Amount.	Rate ₧ £100.	Amount.	Rate ₧ £100.	Amount.	Rate ₧ £100.	Amount.	Rate ₧ £100.
£	d.	£	d.	£	d.	£	d.
3816.60	469.40	559.11	605.18	1619.37	320.00	1101.02	423.87
149.96	18.45	22.64	24.51	..	..	132.47	51.00
9.84	1.21	1.13	1.22	6.16	1.20	3.11	1.20
.39	.05	.05	.05	.24	.05	.12	.04
1.86	.22	.21	.23	1.16	.22	.58	.22
.56	.06	.07	.08	.37	.07	.17	.06
19.28	2.37	2.18	2.36	11.91	2.35	6.12	2.36
37.09	4.56	5.25	5.68	28.23	5.57	14.11	5.44
3.04	.37	.35	.38	1.92	.37	.97	.38
6.54	.80	1.31	1.42	1.50	.29	1.50	.58
.16	.02	.02	.02	.10	.02	.05	.01
6.00	.73	1.50	1.62	5.00	.98	2.50	.97
21.38	2.63	1.20	1.30	7.64	1.50	3.31	1.28
3.70	.46	.43	.46	2.34	.46	1.17	.45
16.89	2.08	2.55	2.76	13.19	2.60	6.24	2.40
.65	.08	.07	.07	.41	.08	.21	.08
1.20	.15	.35	.38	.58	.11	.67	.25
.03	.00	..	..	.01	.00	.01	.00
2.56	.31	.24	.26	1.52	.30	.70	.27
14.31	1.76	1.59	1.72	8.63	1.70	4.51	1.74
17.13	2.11	2.37	2.57	13.00	2.56	6.50	2.53
.20	.02	.02	.02	.13	.02	.06	.01
2.16	.27	.77	.83	.72	.14	1.07	.41
.05	.00	.01	.01	.04	.01	.02	..
22.57	2.78	.62	.67	3.77	.74	1.60	.61
8.27	1.01	..	..	66.90	13.22	41.99	16.16
1.22	.15	..	..	3.15	.62	9.83	3.78
11.52	1.42	1.31	1.42	7.09	1.40	3.64	1.40
303.49	37.33	33.89	36.68	186.59	36.87	95.32	36.70
2.29	.28	1.01	1.09	1.62	.32	4.91	1.89
494.53	60.82	95.99	103.90	267.82	52.93	64.02	24.65
1.69	.21	.13	.14	.93	.18	1.12	.43
101.54	12.49	11.53	12.48	63.00	12.45	33.26	12.43
5.99	.74	.60	.65	4.84	.96	6.76	2.61
5.79	.71	.60	.65	8.76	1.73	55.37	21.32
185.68	22.84	28.45	30.30	364.54	72.05	58.19	22.40
130.33	16.03	19.69	21.31	38.75	7.65	64.33	24.76
1.30	.16	.15	.16	.84	.17	.42	.18
320.06	39.36	34.79	37.66	46.05	9.10	26.39	10.16
5.03	.62	.56	.61	3.12	.62	1.60	.61
.89	.11	.09	.10	.50	.10	.26	.10
4.36	.54	.39	.42	2.35	.46	3.07	1.18
7.82	.96	1.30	1.41	2.82	.56	3.04	1.17
21.60	2.66	1.70	1.84	1.86	.37	2.06	.79
34.81	4.28	4.21	4.56	22.44	4.44	11.13	4.28
129.43	15.92	14.38	15.56	78.35	15.49	41.19	15.86
139.49	17.16	27.80	30.09	47.61	9.41	30.39	11.70
163.33	20.09	25.07	27.14	5.95	1.18	48.66	18.73
657.75	80.90	101.70	110.08	24.75	4.89	192.85	74.25
258.27	31.76	40.16	43.47	55.00	10.87	71.60	27.56
2576.39	316.87	367.30	397.56	738.87	146.03	497.90	191.68
9727.02	1196.31	1416.84	1533.58	3772.44	745.41	2657.09	1022.94

**THE CO-OPERATIVE WHOLESALE  
DISTRIBUTIVE EXPENSES FOR**

SALES=	NEWCASTLE.			
	GROCERY.		DRAPERY.	
	£949,878.		£152,433.	
	Amount.	Rate ₧ £100.	Amount.	Rate ₧ £100.
	£	d.	£	d.
Wages .....	5157·47	130·31	2072·68	326·34
Employés' Bonus .....	..	..	..	..
Auditors' Fees .....	47·76	1·20	7·67	1·21
„ Deputation Fees .....	1·91	·05	·30	·05
„ Fares .....	8·96	·22	1·44	·23
„ Deputation Fares .....	2·78	·07	·44	·07
Fees—General and Branch Committees ..	159·10	4·02	36·83	5·80
„ Sub-Committees .....	55·29	1·40	29·21	4·60
„ Finance Committee .....	14·76	·37	2·39	·38
„ Stocktakers .....	3·93	·10	4·50	·71
„ Scrutineers .....	·80	·02	·13	·02
„ Secretaries .....	12·67	·32	6·21	·98
„ Deputations .....	33·32	·84	3·57	·56
Mileages—General and Branch Committees	25·35	·63	5·34	·72
„ Sub-Committees .....	4·10	·10	3·74	·60
„ Finance Committee .....	3·14	·08	·50	·08
„ Stocktakers .....	·43	·01	·74	·12
„ Scrutineers .....	·15	..	·02	..
„ Deputations .....	·77	·02	·11	·02
Fares—General and Branch Committees..	103·17	2·73	21·71	3·42
„ Sub-Committees .....	16·87	·26	9·38	1·48
„ Finance Committee .....	1·00	·03	·16	·03
„ Stocktakers .....	·99	·02	1·53	·25
„ Scrutineers .....	·31	..	·05	·01
„ Deputations .....	39·76	1·00	2·95	·47
Price Lists: Printing .....	85·30	2·15	2·00	·32
„ Postage .....	26·13	·66	..	..
Balance Sheets: Printing .....	32·12	·81	5·19	·82
Printing and Stationery .....	360·71	9·11	128·63	20·25
Periodicals .....	9·89	·25	·34	·05
Travelling .....	194·85	4·92	238·70	37·59
Telegrams .....	59·56	1·50	6·00	·95
Stamps .....	275·80	6·97	55·54	8·75
Petty Cash .....	19·02	·48	2·90	·46
Advertisements .....	38·49	·97	6·59	1·04
Rents, Rates, and Taxes .....	206·87	5·23	178·65	28·13
Coals, Gas, and Water .....	251·10	6·34	69·85	11·00
Oil, Waste, and Tallow .....	8·66	·22	1·79	·28
Repairs .....	332·95	8·41	96·25	15·16
Expenses—Quarterly Meeting .....	18·00	·45	3·46	·55
„ Conference .....	..	..	..	..
Legal Expenses .....	21·29	·54	3·03	·48
Employés' Picnic .....	4·50	·11	4·00	·63
Telephones .....	13·20	·33	1·83	·29
Annual and Diary .....	168·35	4·23	28·01	4·41
Dining-rooms .....	237·51	6·00	72·28	11·38
Insurance—Fire and Guarantee .....	113·17	2·86	102·11	16·08
Depreciation: Land .....	77·80	1·97	64·71	10·19
„ Buildings .....	473·27	11·96	394·65	62·14
„ Fixtures .....	233·10	6·10	188·93	29·75
Interest .....	3358·61	84·86	1474·62	322·18
	12320·04	311·28	5341·71	841·03



## SOCIETY LIMITED.

THE YEAR ENDING DEC. 25TH, 1886.

NEWCASTLE.		L O N D O N .			
BOOT AND SHOE.		GROCERY.		DRAPERY AND BOOT AND SHOE.	
£97,148.		£527,904.		£79,839.	
Amount.	Rate ₧ £100.	Amount.	Rate ₧ £100.	Amount.	Rate ₧ £100.
£	d.	£	d.	£	d.
1871-74	338-88	3630-99	165-07	2127-07	639-40
4-91	1-21	26-42	1-20	179-67	54-00
20	05	1-05	05	4-00	1-20
91	22	4-96	23	15	04
29	07	1-52	07	73	21
20-48	5-06	135-84	6-18	23	06
18-66	4-61	68-87	3-13	24-51	7-36
1-52	38	8-12	37	45-06	13-53
4-12	1-02	6-28	28	1-24	37
08	02	45	02	7-65	2-29
3-12	77	18-50	84	06	01
4-85	1-20	41-92	1-90	9-00	2-70
3-07	76	53-82	2-45	11-73	3-51
1-79	44	45-81	2-08	12-02	3-60
31	08	1-74	08	28-10	8-44
60	15	1-35	06	27	08
01	02	09	30	2-68	80
07	02	6-59	01	01	64
12-70	3-14	162-37	7-35	2-17	9-40
8-69	2-15	70-70	3-21	31-29	15-27
10	02	55	02	50-80	02
1-20	29	6-89	29	08	2-16
02	1-30	19	01	7-20	02
5-28	5-08	70-40	3-20	02	6-10
20-58	47	212-35	9-65	20-31	14-86
1-91	83	65-21	2-96	49-49	1-04
3-36	30-43	58-45	2-65	3-48	2-65
123-16	53	301-89	13-72	8-84	57-11
2-14	56-40	17-65	80	190-00	1-67
147-35	1-02	280-98	12-71	5-60	76-04
4-13	9-80	20-92	95	252-98	1-27
39-64	48	281-77	12-81	4-25	40-64
1-96	1-49	20-09	91	135-30	4-70
6-01	40-11	14-66	66	15-70	3-70
162-37	7-65	209-95	9-54	7-39	18-50
30-97	27	133-59	6-07	61-55	25-26
1-09	8-80	7-81	35	84-06	98
35-61	55	152-24	6-88	3-30	21-35
2-22	51	14-31	65	71-05	1-14
2-05	62	12-20	55	3-80	1-80
2-50	30	7-26	33	6-04	53
1-22	4-83	32-56	1-47	1-79	12
17-54	11-49	92-54	4-43	4-00	72
46-49	16-18	27-01	1-22	2-44	4-25
65-49	14-02	70-06	3-18	14-14	4-06
56-76	85-49	32-34	1-47	18-51	17-11
346-06	40-95	352-37	16-02	56-94	5-08
165-77	221-21	180-97	8-23	16-93	56-51
895-42		1498-38	68-12	188-02	27-26
				90-69	202-28
				672-92	
3646-52	900-35	8462-43	384-72	4530-26	1361-82

# THE CO-OPERATIVE WHOLESALE STATEMENT OF LAND, BUILDINGS, STEAMSHIPS, AND

		Area in Square Yards.	LAND.				Nominal Value, June 25, 1887.
			Yearly Chief.	Expended.	Deprecia- tion.		
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	
<b>MANCHESTER:—</b>							
Balloon Street, No. 1 .....	Central Offices, Bank, Assembly- room, & Grocery Warehouse.	808	14 11 0	3400 0 0	2221 8 11	1178 11 1	
Garden Street, Nos. 39 & 41 ..	Grocery Warehouse .....	377	7 1 9	3024 0 0	973 14 11	2050 5 1	
Garden Street, No. 37 .....	Grocery Warehouse .....	293	9 0 0	2352 0 0	868 7 9	1483 12 3	
Garden Street, No. 35 .....	Grocery and Furnishing Ware- house and Engine-room ....	733 <sup>3</sup> / <sub>4</sub>	0 12 1	3862 0 5	1828 17 2	2033 3 3	
Balloon Street, Nos. 3 to 13 ..	Dwelling-houses and Shops ..	409 <sup>7</sup> / <sub>8</sub>	4 10 4	6286 0 0	592 4 6	5693 15 6	
Balloon Street, Nos. 15 & 17 ..	Printing Society's Offices and Shop, &c. ....	223 <sup>3</sup> / <sub>4</sub>	....	4000 0 0	376 17 0	3623 3 0	
88 to 92, Corporation-st., Clock Alley, Holgate-st., & Balloon-st.	White Lion Hotel, W'houses on Rental & in course of erection	2936	Freehold.	29463 1 6	2384 5 8	27078 15 10	
Dantzic St. and Garden St....	Drapery Warehouse .....	421	"	5395 0 0	1991 17 5	3403 2 7	
Dantzic St. and Garden St....	Drapery Warehouse (late Boot and Shoe Warehouse).....	202 <sup>3</sup> / <sub>4</sub>	"	2525 0 0	569 16 5	1955 3 7	
Balloon Street, Nos. 4 & 6....	Boot and Shoe Fixtures .....	....	....	....	....	....	
Fisher St. and Garden St....	Empties, &c., Storeroom .....	102	"	930 9 7	341 8 9	589 0 10	
Fisher St. and Garden St....	Tailoring Dep. & Dw'ling-houses	242 <sup>3</sup> / <sub>4</sub>	"	3750 0 0	87 14 7	3662 5 5	
Dantzic St., Nos. 41 to 47 ....	Woollen Cloth and Warehouses on Rental .....	468 <sup>1</sup> / <sub>2</sub>	"	5000 0 0	281 5 0	4718 15 0	
<b>NEWCASTLE-ON-TYNE:—</b>							
Thornton Street and Waterloo Street	Total Manchester....	7216 <sup>5</sup> / <sub>8</sub>	35 15 2	69987 11 6	12517 18 1	57469 13 5	
	Offices, Grocery, and Drapery W'house, Boot & Shoe & Furn- ishing W'house, Dining-rm.	2564	Freehold.	12428 6 8	2819 2 7	9609 4 1	
<b>LONDON:—</b>							
Hooper Square and Leman Street	Offices, Grocery, Drapery, Boot and Shoe, Furnishing, and Tea and Coffee Warehouse ..	1889	"	10000 0 0	942 2 6	9057 17 6	
BRISTOL .....	Warehouse and Sale Rooms ..	....	....	....	....	....	
CRUMPSALL .....	Biscuits and Sweets, and Dry and Soft Soap Works.....	10535	45 0 0	....	....	....	
LEICESTER .....	Boot and Shoe Works .....	1160	Freehold.	5286 0 0	609 13 7	4676 6 5	
HECKMONDWIKE .....	Boot and Shoe Works .....	3667	"	1000 0 0	75 0 0	925 0 0	
DURHAM .....	Soap Works .....	1094 <sup>3</sup> / <sub>4</sub>	"	1094 13 4	335 15 0	758 18 4	
LIVERPOOL .....	Office Fittings.....	....	....	....	....	....	
CHESHIRE .....	Horse and Conveyance.....	....	....	....	....	....	
LEEDS .....	Sale Room.....	....	....	....	....	....	
<b>IRELAND:—</b>							
Limerick (839 years' lease)....	Butter Purchasing Depot ....	480 <sup>1</sup> / <sub>2</sub>	10 0 0	....	....	....	
Waterford .....	" " " .....	....	....	....	....	....	
Kilmallock .....	" " " .....	....	....	....	....	....	
Tipperary (99 years' lease)....	" " " .....	595 <sup>1</sup> / <sub>2</sub>	4 0 0	....	....	....	
Cork .....	" " " .....	....	....	....	....	....	
Tralee (99 years' lease) .....	Butter and Eggs " .....	699 <sup>3</sup> / <sub>4</sub>	5 0 0	....	....	....	
Armagh.....	Butter and Eggs " .....	....	....	....	....	....	
New York (America) .....	Gen. Provision P'chasing Depot	....	....	....	....	....	
COPENHAGEN .....	Butter & Flour P'chasing Depot	....	....	....	....	....	
HAMBURG .....	" " " .....	....	....	....	....	....	
ROUEN (France).....	Shipping Depot, Shed, Office Fittings, &c. ....	....	....	....	....	....	
CALAIS .....	" " Cranes & Lines .....	....	....	....	....	....	
GOOLE .....	" " Office, &c. ....	....	....	....	....	....	
Longsight .....	Land .....	45347	Freehold.	9336 17 9	867 2 10	8469 14 11	
Gorton .....	Dwelling-houses and Shops ..	9000	....	....	....	....	
Bolton .....	Dwelling-houses and Shops ..	12183 <sup>1</sup> / <sub>2</sub>	130 3 0	....	....	....	
Newhall .....	Dwelling-houses and Shops ..	7260	Freehold.	300 0 0	28 5 3	271 14 9	
Taff .....	Dwelling-houses and Shops....	1150	9 11 0	....	....	....	
South Shields.....	Dwelling-houses and Shops....	453 <sup>1</sup> / <sub>2</sub>	Freehold.	165 0 0	13 10 0	151 10 0	
Batley .....	Woollen Cloth Works .....	....	....	....	....	....	
Garston and Rouen Line .....	S.S. "Pioneer" .....	....	....	....	....	....	
Goole and Calais and Goole and Hamburg Lines ....	S.S. "Cambrian" .....	....	....	....	....	....	
	S.S. "Unity" .....	....	....	....	....	....	
	S.S. "Progress" .....	....	....	....	....	....	
	S.S. "Federation" .....	....	....	....	....	....	
Totals..105289 <sup>3</sup> / <sub>8</sub>			389 9 2	109598 9 3	18208 9 10	91389 19 5	



## SOCIETY LIMITED.

FIXTURES, QUARTER ENDING JUNE 25TH, 1887.

BUILDINGS AND STEAMSHIPS.			FIXTURES.			TOTALS.		
Expended.	Deprecia- tion.	Nominal Value, June 25, 1887.	Expended.	Deprecia- tion.	Nominal Value, June 25, 1887.	Expended.	Deprecia- tion.	Nominal Value, June 25, 1887.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
10736 15 6	8264 2 7	2472 12 11	7866 5 9	7669 18 11	196 6 10	22003 1 3	18155 10 5	3847 10 10
12666 5 11	8669 3 2	8997 2 9	306 5 6	139 14 4	166 11 2	15996 11 5	4782 12 5	11213 19 0
1183 7 0	840 13 0	342 14 0	1132 9 6	877 18 5	254 11 1	4667 16 6	2586 19 2	2080 17 4
6130 16 0	2020 16 0	4110 0 0	2290 7 10	994 19 1	1295 8 9	12283 4 3	4844 12 3	7438 12 0
....	....	....	27 14 6	16 14 6	11 0 0	6813 14 6	603 19 0	5704 15 6
533 3 0	100 16 11	432 6 1	23 5 8	15 9 2	7 16 6	4556 8 8	493 3 1	4063 5 7
18122 2 3	695 16 8	17426 5 7	841 19 9	15 15 9	826 4 0	48427 3 6	3095 18 1	45331 5 5
8388 3 7	5505 3 1	2883 0 6	2749 10 3	2316 15 6	432 14 9	16532 13 10	9813 16 0	6718 17 10
5683 19 6	3000 1 11	2683 17 7	701 16 5	509 8 7	192 7 10	8910 15 11	4079 6 11	4831 9 0
....	....	....	153 11 5	28 16 4	124 15 1	153 11 5	28 16 4	124 15 1
....	....	....	....	....	....	930 9 7	341 8 9	589 0 10
473 6 0	112 17 1	360 8 11	....	....	....	4223 6 0	200 11 8	4022 14 4
8000 0 0	900 0 0	7100 0 0	133 5 0	19 13 3	113 11 9	13133 5 0	1200 18 3	11932 6 9
71917 18 9	25109 10 5	46808 8 4	16226 11 7	12605 3 10	3621 7 9	158132 1 10	50232 12 4	107899 9 6
39971 6 7	10780 10 0	29190 16 7	10161 3 5	5664 18 2	4496 5 3	62560 16 8	19264 10 9	49296 5 11
54634 19 5	8806 3 7	45828 15 10	15489 18 5	3860 9 7	11629 8 10	80124 17 10	13608 15 8	66516 2 2
....	....	....	343 11 9	71 0 10	272 10 11	343 11 9	71 0 10	272 10 11
13882 19 0	4422 19 11	9459 19 1	8547 14 10	3881 15 3	4665 19 7	22430 13 10	8304 15 2	14125 18 8
14054 16 2	4460 4 6	9594 11 8	4851 19 11	2629 7 9	2222 12 2	24192 16 1	7699 5 10	16493 10 3
4331 9 6	438 16 7	3892 12 11	1330 12 10	497 19 3	832 13 7	6662 2 4	1011 15 10	5650 6 6
3924 9 11	2212 16 10	1711 13 1	2973 1 0	2249 13 6	723 7 6	7992 4 3	4798 5 4	3193 18 11
....	....	....	146 3 6	112 15 1	33 8 5	146 3 6	112 15 1	33 8 5
....	....	....	175 15 0	140 16 3	34 18 9	175 15 0	140 16 3	34 18 9
....	....	....	13 4 6	4 14 8	8 9 10	13 4 6	4 14 8	8 9 10
351 15 4	265 8 10	86 6 6	230 12 11	218 19 3	11 13 8	582 8 3	484 8 1	98 0 2
....	....	....	3 12 5	3 5 7	0 6 10	3 12 5	3 5 7	0 6 10
....	....	....	4 10 0	4 5 6	0 4 6	4 10 0	4 5 6	0 4 6
840 7 0	552 17 0	287 10 0	23 4 8	20 7 1	2 17 7	863 11 8	573 4 1	290 7 7
....	....	....	50 7 4	32 4 4	18 3 0	50 7 4	32 4 4	18 3 0
687 14 4	343 1 5	344 12 11	168 6 11	127 13 9	40 13 2	687 14 4	343 1 5	344 12 11
....	....	....	5 12 3	4 7 9	1 4 6	168 6 11	127 13 9	40 13 2
....	....	....	62 14 7	24 5 11	38 8 8	62 14 7	24 5 11	38 8 8
....	....	....	15 6 11	3 14 0	11 12 11	15 6 11	3 14 0	11 12 11
....	....	....	162 0 9	34 16 9	127 4 0	162 0 9	34 16 9	127 4 0
....	....	....	1015 6 9	308 17 8	706 9 1	1015 6 9	308 17 8	706 9 1
61 0 0	24 9 1	36 10 11	128 10 3	56 2 8	72 7 7	189 10 3	80 11 9	108 18 6
12560 18 7	3136 8 5	9424 10 2	....	....	....	9336 17 9	867 2 10	8469 14 11
8439 15 9	2364 11 7	6075 4 2	....	....	....	12560 18 7	3136 8 5	9424 10 2
494 4 4	142 10 1	351 14 3	....	....	....	8439 15 9	2364 11 7	6075 4 2
3047 12 3	612 7 1	2435 5 2	....	....	....	794 4 4	170 15 4	623 9 0
1381 4 0	225 14 1	1155 9 11	....	....	....	3047 12 3	612 7 1	2435 5 2
....	....	....	....	....	....	1546 4 0	239 4 1	1306 19 11
11458 3 7	4812 5 5	6645 18 2	1548 1 1	31 8 4	1516 12 9	1548 1 1	31 8 4	1516 12 9
7497 14 6	2219 14 9	5277 19 9	....	....	....	11458 3 7	4812 5 5	6645 18 2
8633 15 5	1678 15 8	6954 19 9	....	....	....	7497 14 6	2219 14 9	5277 19 9
8933 17 7	1235 9 3	7708 8 4	....	....	....	8633 15 5	1678 15 8	6954 19 9
14973 6 2	625 15 0	14347 11 2	....	....	....	8933 17 7	1235 9 3	7708 8 4
....	....	....	....	....	....	14973 6 2	625 15 0	14347 11 2
*230582 10 11	*63898 9 5	*166684 1 6	63678 3 7	32589 2 9	31089 0 10	455416 1 0	125318 2 1	330097 18 11
+51556 17 3	+10622 0 1	+40934 17 2	....	....	....	....	....	....

\* Buildings. † Steamships.



# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER GROCERY AND PROVISION TRADE.

*From the time of commencing to keep a separate Account.*

### QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		Stocks.
		Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£
July, 1874 .....	353216	3682	0 2½	1831	0 1½	64083
Oct. " .....	471586	4342	0 2¾	6905	0 3½	71841
January, 1875 .....	285353	3692	0 3½	3250	0 2¼	71360
April " .....	306720	3627	0 2½	2032	0 1½	52803
July " .....	359076	3458	0 2½	3996	0 2½	51573
October " .....	427793	3884	0 2½	6379	0 3½	50723
January, 1876 .....	382947	3732	0 2½	6635	0 4¾	56487
April " .....	355644	4091	0 2½	5070	0 3½	55040
July " .....	398787	4603	0 2½	3975	0 2½	50136
October " (14 weeks) .....	543067	4685	0 2½	10514	0 4½	64695
January, 1877 .....	410139	4318	0 2½	8434	0 4¾	68205
April " .....	350666	4257	0 2½	2501	0 1½	47424
July " .....	475064	4261	0 2½	6848	0 3½	64838
October " .....	513321	4157	0 2½	10377	0 4½	63592
January, 1878 .....	421966	4191	0 2½	6019	0 3½	53790
April " .....	392083	4380	0 2½	6127	0 3½	61765
July " .....	401932	4401	0 2½	5216	0 3	57128
October " .....	491527	4392	0 2½	8669	0 4½	59793
January, 1879 .....	398071	4200	0 2½	6490	0 3½	55319
March " (10 weeks) .....	263534	3254	0 2½	2790	0 2½	71347
June " (14 " ) .....	404338	4722	0 2½	3659	0 2½	79086
September, 1879 .....	452049	4376	0 2½	9306	0 4½	61379
December, " .....	470086	4409	0 2½	13071	0 6½	71446
March, 1880 .....	418000	4644	0 2½	5706	0 3½	95015
June " .....	484068	4797	0 2½	4327	0 2½	82832
September, " .....	564183	4718	0 2	12086	0 5½	102466
December " .....	532133	4752	0 2½	8858	0 4	70091
March 1881 .....	404706	4692	0 2½	5927	0 3½	84602
June " .....	497493	4865	0 2½	7256	0 3½	81648
Sept. " .....	598864	5019	0 2	11227	0 4½	84093
Dec. " .....	546147	5307	0 2½	8050	0 3½	87277
March, 1882 .....	468027	5884	0 3	6222	0 3½	107940
June " .....	559537	5839	0 2½	6187	0 2½	92310
Sept. " .....	617265	5704	0 2½	9339	0 3½	92696
Dec. " .....	653521	6239	0 2½	8896	0 3½	141191
March, 1883 .....	558465	7029	0 3	7296	0 3½	125416
June " .....	606478	7097	0 2½	4360	0 1½	130279
Sept. " .....	692614	6927	0 2½	7514	0 2½	97095
Dec. " .....	686852	7234	0 2½	8285	0 2½	109414
March, 1884 .....	502853	7007	0 3½	5493	0 2½	89334
June " (14 weeks) .....	641730	7616	0 2½	5262	0 1½	94779
Sept. " .....	675845	6972	0 2½	7602	0 2½	104832
Dec. " .....	636860	6927	0 2½	6536	0 2½	107524
March, 1885 .....	514235	7124	0 3½	7455	0 3½	78912
June " .....	578862	6746	0 2½	13340	0 5½	90348
Sept. " .....	644647	6586	0 2½	10555	0 3½	97421
Dec. " .....	638201	7028	0 2½	10407	0 3½	92790
March, 1886 .....	568243	7131	0 3	8553	0 3½	95156
June " .....	600340	7291	0 2½	7454	0 2½	78561
Sept. " .....	671578	7469	0 2½	10913	0 3½	104934
Dec. " .....	730774	7986	0 2½	14461	0 4½	113620
March, 1887 .....	604978	7724	0 5	10305	0 4	103609
June " .....	648521	7976	0 2½	8133	0 3	96828
	26875485	287389	0 2½	368099	0 3½	....

## THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER DRAPERY AND WOOLLEN CLOTH TRADE.

*From the time of commencing to keep a separate Account.*

## QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		Loss.		Stocks.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1874.....	10575	348	0 8	201	0 4 <sup>9</sup> / <sub>16</sub>	....	....	11568
April ".....	12712	564	0 10 <sup>3</sup> / <sub>8</sub>	436	0 8 <sup>1</sup> / <sub>16</sub>	....	....	19409
July ".....	12991	967	1 4	952	1 5 <sup>5</sup> / <sub>16</sub>	....	....	26002
October ".....	24185	1223	1 0 <sup>1</sup> / <sub>2</sub>	....	....	560	0 5 <sup>1</sup> / <sub>2</sub>	31475
January, 1875.....	21402	1218	1 1 <sup>3</sup> / <sub>16</sub>	416	0 4 <sup>9</sup> / <sub>16</sub>	....	....	36824
April ".....	26273	1319	1 0 <sup>1</sup> / <sub>16</sub>	239	0 2 <sup>1</sup> / <sub>16</sub>	....	....	37905
July ".....	30513	1748	1 1 <sup>1</sup> / <sub>2</sub>	376	0 3	....	....	47101
October ".....	36071	2041	1 1 <sup>9</sup> / <sub>16</sub>	246	0 1 <sup>5</sup> / <sub>16</sub>	....	....	65230
January, 1876.....	36629	2156	1 2 <sup>1</sup> / <sub>16</sub>	....	....	141	0 0 <sup>7</sup> / <sub>8</sub>	72408
April ".....	41708	2397	1 1 <sup>1</sup> / <sub>16</sub>	60	0 0 <sup>5</sup> / <sub>16</sub>	....	....	74071
July ".....	32996	2509	1 6 <sup>1</sup> / <sub>16</sub>	....	....	634	0 4 <sup>5</sup> / <sub>16</sub>	73883
October " (14 weeks)	38977	2370	1 2 <sup>3</sup> / <sub>16</sub>	....	....	453	0 2 <sup>7</sup> / <sub>16</sub>	70898
January, 1877.....	35402	2115	1 3 <sup>3</sup> / <sub>16</sub>	....	....	393	0 2 <sup>3</sup> / <sub>16</sub>	69267
April ".....	31620	2316	1 5 <sup>3</sup> / <sub>16</sub>	....	....	1678	1 0 <sup>4</sup> / <sub>16</sub>	64349
July ".....	25640	2197	1 8 <sup>9</sup> / <sub>16</sub>	....	....	1115	0 10 <sup>7</sup> / <sub>16</sub>	66539
October ".....	31389	2148	1 4 <sup>7</sup> / <sub>16</sub>	....	....	154	0 1 <sup>3</sup> / <sub>16</sub>	62442
January, 1878.....	36269	2218	1 2 <sup>3</sup> / <sub>16</sub>	....	....	1197	0 8	48511
April ".....	37000	2162	1 2	316	0 2	....	....	44995
July ".....	31486	2186	1 4 <sup>3</sup> / <sub>16</sub>	60	0 0 <sup>1</sup> / <sub>16</sub>	....	....	43849
October ".....	33703	2146	1 3 <sup>1</sup> / <sub>16</sub>	191	0 1	....	....	44662
January, 1879.....	32557	2024	1 2 <sup>3</sup> / <sub>16</sub>	68	0 0 <sup>1</sup> / <sub>16</sub>	....	....	44439
March " (10 weeks)	25869	1622	1 3	193	0 1	....	....	44151
June " (14 weeks)	33171	2116	1 3 <sup>1</sup> / <sub>16</sub>	619	0 4 <sup>1</sup> / <sub>16</sub>	....	....	43960
Sept. ".....	30136	2022	1 4	168	0 1	....	....	44446
Dec. ".....	37648	2057	1 1	694	0 4 <sup>1</sup> / <sub>16</sub>	....	....	43225
March, 1880.....	37484	2162	1 1 <sup>7</sup> / <sub>16</sub>	472	0 3	....	....	41788
June ".....	34195	2035	1 2 <sup>1</sup> / <sub>16</sub>	374	0 2 <sup>5</sup> / <sub>16</sub>	....	....	43792
Sept. ".....	30734	2264	1 5 <sup>5</sup> / <sub>16</sub>	201	0 1 <sup>1</sup> / <sub>16</sub>	....	....	45664
Dec. ".....	37008	2044	1 1 <sup>1</sup> / <sub>16</sub>	1267	0 8	....	....	44105
March, 1881.....	32449	2078	1 3 <sup>3</sup> / <sub>16</sub>	564	0 4 <sup>1</sup> / <sub>16</sub>	....	....	40245
June ".....	30939	2002	1 3 <sup>1</sup> / <sub>16</sub>	453	0 3 <sup>1</sup> / <sub>16</sub>	....	....	43533
Sept. ".....	31825	2060	1 3 <sup>1</sup> / <sub>16</sub>	322	0 2 <sup>1</sup> / <sub>16</sub>	....	....	43315
Dec. ".....	37701	2028	1 0 <sup>7</sup> / <sub>16</sub>	593	0 3 <sup>3</sup> / <sub>16</sub>	....	....	42203
March, 1882.....	34875	2064	1 2 <sup>1</sup> / <sub>16</sub>	820	0 5 <sup>1</sup> / <sub>16</sub>	....	....	39171
June ".....	32539	2017	1 2 <sup>1</sup> / <sub>16</sub>	809	0 5 <sup>1</sup> / <sub>16</sub>	....	....	44073
Sept. ".....	33933	2083	1 2 <sup>3</sup> / <sub>16</sub>	535	0 3 <sup>1</sup> / <sub>16</sub>	....	....	42487
Dec. ".....	41622	2173	1 0 <sup>1</sup> / <sub>16</sub>	1340	0 7 <sup>1</sup> / <sub>16</sub>	....	....	40854
March, 1883.....	38527	2250	1 2	325	0 2	....	....	39420
June ".....	33329	2098	1 3	1165	0 8 <sup>1</sup> / <sub>16</sub>	....	....	38606
Sept. ".....	38935	2241	1 1 <sup>3</sup> / <sub>16</sub>	856	0 5 <sup>1</sup> / <sub>16</sub>	....	....	43097
Dec. ".....	46206	2387	1 0 <sup>1</sup> / <sub>16</sub>	1825	0 9 <sup>1</sup> / <sub>16</sub>	....	....	41365
March, 1884.....	43145	2306	1 0 <sup>1</sup> / <sub>16</sub>	768	0 4	....	....	38727
June " (14 weeks)...	46839	2538	1 1	1054	0 5 <sup>1</sup> / <sub>16</sub>	....	....	41271
Sept. ".....	45933	2391	1 0 <sup>1</sup> / <sub>16</sub>	1735	0 9	....	....	45074
Dec. ".....	50220	2352	0 11 <sup>1</sup> / <sub>16</sub>	2136	0 10 <sup>1</sup> / <sub>16</sub>	....	....	42433
March, 1885.....	50626	2543	1 0	1768	0 8 <sup>1</sup> / <sub>16</sub>	....	....	42168
June ".....	43007	2439	1 1 <sup>3</sup> / <sub>16</sub>	1403	0 7 <sup>1</sup> / <sub>16</sub>	....	....	44931
Sept. ".....	47128	2543	1 0 <sup>1</sup> / <sub>16</sub>	1530	0 7 <sup>1</sup> / <sub>16</sub>	....	....	52236
Dec. ".....	53682	2790	1 0 <sup>1</sup> / <sub>16</sub>	1023	0 4 <sup>1</sup> / <sub>16</sub>	....	....	50570
March, 1886.....	53002	2726	1 0 <sup>1</sup> / <sub>16</sub>	960	0 4 <sup>1</sup> / <sub>16</sub>	....	....	50570
June ".....	52440	2630	1 0	1873	0 8 <sup>1</sup> / <sub>16</sub>	....	....	51753
Sept. ".....	53443	2822	1 0 <sup>3</sup> / <sub>16</sub>	1086	0 4 <sup>1</sup> / <sub>16</sub>	....	....	56784
Dec. ".....	58427	2965	1 0 <sup>1</sup> / <sub>16</sub>	1736	0 7 <sup>1</sup> / <sub>16</sub>	....	....	60405
March, 1887.....	55992	2876	1 0 <sup>1</sup> / <sub>16</sub>	1295	0 5 <sup>1</sup> / <sub>16</sub>	....	....	62131
June ".....	54519	3019	1 1 <sup>1</sup> / <sub>16</sub>	894	0 3 <sup>1</sup> / <sub>16</sub>	....	....	67260
	2025676	117021	1 1 <sup>7</sup> / <sub>8</sub>	36422	....	6325	....	....
Less Depreciation allowed, see Disposal of Profit Account, October, 1877.....			£4757					
" Loss .....			6325	11082				
Leaves Net Profit .....			....	25340	0 3			

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER WOOLLEN CLOTH DEPARTMENT.

*From the time of commencing to publish a separate Account in Balance Sheet.*

### QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		LOSS.		Stocks.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
		£	s. d.	£	s. d.	£	s. d.	
March 1884 .....	4504	307	1 4 $\frac{1}{4}$	1	....	....	....	4899
June " (14 weeks) ..	7243	341	0 11 $\frac{1}{4}$	226	0 7 $\frac{3}{8}$	....	....	4212
September " .....	4272	301	1 4 $\frac{5}{8}$	408	1 10 $\frac{7}{8}$	....	....	4720
December " .....	4349	272	1 3	....	....	226	1 0 $\frac{3}{8}$	4407
March 1885 .....	5748	294	1 0 $\frac{1}{2}$	159	0 6 $\frac{5}{8}$	....	....	5031
June " .....	6186	307	0 11 $\frac{7}{8}$	195	0 7 $\frac{1}{2}$	....	....	4151
September " .....	4476	310	1 4 $\frac{7}{8}$	61	0 8 $\frac{1}{4}$	....	....	5723
December " .....	4800	338	1 4 $\frac{7}{8}$	....	....	79	0 3 $\frac{7}{8}$	5242
March 1886 .....	5129	374	1 5 $\frac{1}{8}$	....	....	170	0 7 $\frac{1}{8}$	6961
June " .....	7542	359	0 11 $\frac{3}{8}$	401	1 0 $\frac{3}{4}$	....	....	5661
September " .....	4363	331	1 6 $\frac{1}{8}$	77	0 4 $\frac{1}{8}$	....	....	6641
December " .....	5139	353	1 4 $\frac{3}{8}$	19	0 0 $\frac{5}{8}$	....	....	6275
March 1887 .....	5684	357	1 3	....	....	84	0 3 $\frac{1}{2}$	7060
June " .....	6213	354	1 1 $\frac{5}{8}$	203	0 7 $\frac{3}{4}$	....	....	6023
	75648	4598	1 2 $\frac{1}{2}$	1750	....	559	....	....
		Less Loss .....		559	....			
		Leaves Net Profit ..		1191	0 8 $\frac{3}{4}$			



# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER BOOT AND SHOE TRADE.

*From the time of commencing to keep a separate Account.*

### QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		Loss.		Stocks.
		Amount.	Rate.	Amount.	Rate.	Amount.	Rate.	
	£	£		£	£	£		£
January, 1874.....	5506	204	8 $\frac{3}{4}$	1	..	..	..	4715
April ".....	7529	281	7 $\frac{1}{2}$	352	11 $\frac{1}{2}$	..	..	4856
July ".....	10794	288	6 $\frac{1}{2}$	214	4 $\frac{1}{2}$	..	..	4812
October ".....	8877	321	8 $\frac{1}{2}$	..	..	95	2 $\frac{1}{2}$	4897
January, 1875.....	10057	289	6 $\frac{1}{2}$	277	6 $\frac{1}{2}$	..	..	5197
April ".....	12240	310	6	341	6 $\frac{1}{2}$	..	..	4614
July ".....	14275	321	5 $\frac{1}{2}$	16	..	..	..	5359
October ".....	15234	351	5 $\frac{1}{2}$	341	5 $\frac{1}{2}$	..	..	7474
January, 1876.....	12136	344	6 $\frac{1}{2}$	77	1 $\frac{1}{2}$	..	..	7711
April ".....	13777	418	7 $\frac{1}{2}$	187	3 $\frac{1}{2}$	..	..	8517
July ".....	15259	474	7 $\frac{1}{2}$	172	2 $\frac{1}{2}$	..	..	7894
October " (14 weeks)	15893	472	7 $\frac{1}{2}$	168	2 $\frac{1}{2}$	..	..	7243
January, 1877.....	12378	447	8 $\frac{1}{2}$	59	1 $\frac{1}{2}$	..	..	6082
April ".....	14018	461	7 $\frac{1}{2}$	220	3 $\frac{1}{2}$	..	..	6973
July ".....	16969	516	6 $\frac{1}{2}$	332	4 $\frac{1}{2}$	..	..	7994
October ".....	14185	498	8 $\frac{1}{2}$	132	2 $\frac{1}{2}$	..	..	7594
January, 1878.....	13132	500	9 $\frac{1}{2}$	102	1 $\frac{1}{2}$	..	..	7935
April ".....	13591	572	10	153	2 $\frac{1}{2}$	..	..	8349
July ".....	17913	564	7 $\frac{1}{2}$	417	5 $\frac{1}{2}$	..	..	9646
October ".....	15585	580	8 $\frac{1}{2}$	340	5 $\frac{1}{2}$	..	..	9658
January, 1879.....	12238	476	9 $\frac{1}{2}$	..	..	143	2 $\frac{1}{2}$	10242
March " (10 weeks)	8835	403	10 $\frac{1}{2}$	234	6 $\frac{1}{2}$	..	..	10517
June " (14 weeks)	17443	579	8	415	5 $\frac{1}{2}$	..	..	10998
September ".....	14150	583	9 $\frac{1}{2}$	119	2	..	..	10709
December ".....	14842	570	9 $\frac{1}{2}$	..	..	16	1 $\frac{1}{2}$	10964
March, 1880.....	15095	585	9 $\frac{1}{2}$	479	7 $\frac{1}{2}$	..	..	10301
June ".....	17613	609	8 $\frac{1}{2}$	147	2	..	..	10688
September ".....	15069	600	9 $\frac{1}{2}$	125	2	..	..	10250
December ".....	14362	593	10	4	..	..	..	11484
March 1881.....	15375	596	9 $\frac{1}{2}$	199	3	..	..	10107
June ".....	21621	660	7 $\frac{1}{2}$	335	3 $\frac{1}{2}$	..	..	11254
September ".....	17362	630	8 $\frac{1}{2}$	184	2 $\frac{1}{2}$	..	..	11542
December ".....	17024	606	8 $\frac{1}{2}$	124	1 $\frac{1}{2}$	..	..	11377
March, 1882.....	16838	637	9	121	1 $\frac{1}{2}$	..	..	10945
June ".....	22134	660	7 $\frac{1}{2}$	384	4 $\frac{1}{2}$	..	..	12395
September ".....	18328	637	8 $\frac{1}{2}$	419	5 $\frac{1}{2}$	..	..	12263
December ".....	18801	649	8 $\frac{1}{2}$	322	4	..	..	12564
March, 1883.....	20091	704	8 $\frac{1}{2}$	183	2 $\frac{1}{2}$	..	..	15967
June ".....	25186	772	7 $\frac{1}{2}$	537	5	..	..	13817
September ".....	20457	701	8 $\frac{1}{2}$	355	4 $\frac{1}{2}$	..	..	13335
December ".....	20322	705	8 $\frac{1}{2}$	186	2 $\frac{1}{2}$	..	..	12938
March, 1884.....	20277	687	8 $\frac{1}{2}$	292	3 $\frac{1}{2}$	..	..	13955
June " (14 weeks)	31093	881	6 $\frac{1}{2}$	567	4 $\frac{1}{2}$	..	..	14274
September ".....	26084	802	7 $\frac{1}{2}$	372	3 $\frac{1}{2}$	..	..	14675
December ".....	22240	730	8 $\frac{1}{2}$	355	3 $\frac{1}{2}$	..	..	16576
March, 1885.....	26485	930	8 $\frac{1}{2}$	80	0 $\frac{1}{2}$	..	..	17766
June ".....	31199	919	7	535	4	..	..	16088
Sept. ".....	24394	840	8 $\frac{1}{2}$	504	4 $\frac{1}{2}$	..	..	16240
December ".....	24677	907	8 $\frac{1}{2}$	276	2 $\frac{1}{2}$	..	..	16074
March, 1886.....	27103	890	7 $\frac{1}{2}$	392	3 $\frac{1}{2}$	..	..	17581
June ".....	38429	1033	6 $\frac{1}{2}$	606	3 $\frac{1}{2}$	..	..	17772
September ".....	27000	968	8 $\frac{1}{2}$	876	7	..	..	17066
December ".....	28900	881	7 $\frac{1}{2}$	893	7 $\frac{1}{2}$	..	..	16578
March, 1887.....	28969	952	7 $\frac{1}{2}$	704	5 $\frac{1}{2}$	..	..	21418
June ".....	38380	1148	7 $\frac{1}{2}$	1174	7 $\frac{1}{2}$	..	..	21044
	1017764	33734	7 $\frac{1}{2}$	16399	..	254	..	..
Less Loss.....				254	..			
Leaves Net Profit.....				16145	3 $\frac{3}{4}$			

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER FURNISHING TRADE.

*From the time of commencing to keep a separate Account.*

### QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		LOSS.		Stocks.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£	s. d.	£
October, 1876 (14 weeks)	3086	188	1 2 <sup>3</sup> / <sub>4</sub>	..	..	57	0 4	2848
January, 1877 .....	2908	217	1 6	5	0 0 <sup>3</sup> / <sub>8</sub>	..	..	2571
April " .....	3813	250	1 3 <sup>3</sup> / <sub>4</sub>	37	0 3	..	..	2423
July " .....	3426	216	1 8 <sup>1</sup> / <sub>2</sub>	..	..	24	0 1 <sup>3</sup> / <sub>8</sub>	2274
October " .....	4166	242	1 1 <sup>1</sup> / <sub>2</sub>	45	0 2 <sup>1</sup> / <sub>2</sub>	..	..	2343
January, 1878.....	4059	276	1 4 <sup>5</sup> / <sub>8</sub>	7	0 0 <sup>1</sup> / <sub>2</sub>	..	..	2286
April " .....	4397	310	1 4 <sup>1</sup> / <sub>2</sub>	121	0 6	..	..	2245
July " .....	4141	291	1 4 <sup>1</sup> / <sub>2</sub>	14	0 0 <sup>1</sup> / <sub>2</sub>	..	..	2272
October " .....	4320	307	1 5	29	0 1 <sup>3</sup> / <sub>8</sub>	..	..	2279
January, 1879.....	4516	277	1 2 <sup>5</sup> / <sub>8</sub>	..	..	24	0 1 <sup>1</sup> / <sub>4</sub>	2421
March " (10 weeks)	3624	218	1 2	26	0 1 <sup>1</sup> / <sub>2</sub>	..	..	2837
June " (14 weeks)	5249	325	1 3 <sup>5</sup> / <sub>8</sub>	30	0 1 <sup>1</sup> / <sub>2</sub>	..	..	3074
September " .....	4291	280	1 3 <sup>1</sup> / <sub>4</sub>	..	..	33	0 1 <sup>3</sup> / <sub>8</sub>	3163
December " .....	5197	285	1 1	37	0 1 <sup>3</sup> / <sub>4</sub>	..	..	3524
March, 1880.....	6530	327	1 0	29	0 1	..	..	4013
June " .....	5144	347	1 4 <sup>1</sup> / <sub>2</sub>	4	0 0 <sup>1</sup> / <sub>2</sub>	..	..	4313
September " .....	5922	313	1 0 <sup>1</sup> / <sub>2</sub>	102	0 4 <sup>1</sup> / <sub>2</sub>	..	..	3969
December " .....	6647	330	0 11	269	0 9 <sup>1</sup> / <sub>2</sub>	..	..	4307
March, 1881.....	6209	333	1 0	..	..	14	0 0 <sup>1</sup> / <sub>2</sub>	4146
June " .....	6085	318	1 0 <sup>1</sup> / <sub>2</sub>	91	0 3 <sup>1</sup> / <sub>2</sub>	..	..	4496
Sept. " .....	5736	320	1 1 <sup>1</sup> / <sub>2</sub>	..	..	29	0 1 <sup>3</sup> / <sub>8</sub>	4039
December " .....	6814	322	0 11 <sup>1</sup> / <sub>2</sub>	123	0 4 <sup>1</sup> / <sub>2</sub>	..	..	3971
March, 1882.....	6783	351	1 0	115	0 4	..	..	4122
June " .....	6786	344	1 0	82	0 2 <sup>1</sup> / <sub>2</sub>	..	..	3827
Sept. " .....	7293	419	1 1	61	0 2	..	..	3721
Dec. " .....	8159	401	0 11 <sup>1</sup> / <sub>2</sub>	..	..	39	0 1 <sup>3</sup> / <sub>8</sub>	3630
March, 1883.....	7812	439	1 1	95	0 2 <sup>7</sup> / <sub>8</sub>	..	..	3845
June " .....	7936	455	1 1	99	0 2 <sup>5</sup> / <sub>8</sub>	..	..	4308
September " .....	7954	472	1 2 <sup>1</sup> / <sub>2</sub>	32	0 0 <sup>1</sup> / <sub>2</sub>	..	..	4337
December " .....	11102	512	0 11	197	0 4 <sup>1</sup> / <sub>2</sub>	..	..	4274
March, 1884.....	9850	540	1 1 <sup>1</sup> / <sub>2</sub>	204	0 4 <sup>5</sup> / <sub>8</sub>	..	..	5100
June " (14 weeks)	11280	595	1 0	..	..	26	0 0 <sup>1</sup> / <sub>2</sub>	5170
September " .....	11002	566	1 0 <sup>1</sup> / <sub>2</sub>	205	0 4 <sup>1</sup> / <sub>2</sub>	..	..	5072
December " .....	12179	552	0 10 <sup>1</sup> / <sub>2</sub>	290	0 5 <sup>1</sup> / <sub>2</sub>	..	..	5433
March, 1885.....	13126	626	0 11	329	0 6	..	..	5973
June " .....	12228	611	0 11	123	0 2 <sup>3</sup> / <sub>8</sub>	..	..	6145
Sept. " .....	12539	582	0 11	166	0 3 <sup>1</sup> / <sub>2</sub>	..	..	5771
December " .....	13345	596	0 10 <sup>1</sup> / <sub>2</sub>	275	0 4 <sup>1</sup> / <sub>2</sub>	..	..	5817
March 1886.....	13929	624	0 10 <sup>1</sup> / <sub>2</sub>	207	0 3 <sup>1</sup> / <sub>2</sub>	..	..	5773
June " .....	15251	684	0 10 <sup>1</sup> / <sub>2</sub>	374	0 5 <sup>7</sup> / <sub>8</sub>	..	..	6234
Sept. " .....	15277	650	0 10	182	0 2 <sup>1</sup> / <sub>2</sub>	..	..	5936
December " .....	17883	699	0 9 <sup>3</sup> / <sub>8</sub>	366	0 4 <sup>1</sup> / <sub>2</sub>	..	..	6581
March, 1887.....	17284	676	0 9 <sup>3</sup> / <sub>8</sub>	277	0 3 <sup>3</sup> / <sub>4</sub>	..	..	7691
June " .....	18037	758	0 10	361	0 4 <sup>3</sup> / <sub>4</sub>	..	..	7858
	363265	18444	1 0 <sup>1</sup> / <sub>2</sub>	5009	..	246	..	..
				246	..			
				4763	0 3 <sup>1</sup> / <sub>2</sub>			



## THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## NEWCASTLE BRANCH GROCERY AND PROVISION TRADE.

*From the time of commencing to keep a separate Account.*

## QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		Loss.		Stocks.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£	s. d.	£
April, 1876 .....	131789	1791	0 3½	1768	0 3½	..	..	26712
July, " .....	124393	1938	0 3½	1161	0 2½	..	..	32241
October, 1876 (14 weeks) .....	152237	2036	0 3½	766	0 1½	..	..	40908
January, 1877 .....	120825	1962	0 3½	836	0 1½	..	..	34591
April, " .....	132575	2053	0 3½	1389	0 2	..	..	30086
July, " .....	141614	1990	0 3½	1218	0 2½	..	..	22718
October, " .....	140902	2001	0 3½	919	0 1	..	..	29594
January, 1878 .....	126692	2169	0 4½	613	0 1½	..	..	28996
April, " .....	120300	2028	0 4	983	0 2	..	..	26089
July, " .....	112256	1898	0 4	647	0 1½	..	..	20350
October, " .....	111069	1679	0 3	903	0 1½	..	..	24383
May, 1879 .....	118972	1797	0 3½	635	0 1½	..	..	27789
March, " (10 weeks) .....	85774	1815	0 3½	2648	0 7½	..	..	25284
June, " (14 " ) .....	113673	1886	0 3½	1470	0 3	..	..	21031
September, " .....	119668	1697	0 3½	..	..	167	0 0¼	29290
December, " .....	145993	1925	0 3	3283	0 5½	..	..	49145
March, 1880 .....	146614	2064	0 3½	1023	0 1½	..	..	40786
June, " .....	145848	1905	0 3½	734	0 1½	..	..	25906
September, " .....	142258	1858	0 3½	1185	0 2	..	..	33883
December, " .....	153944	2041	0 3	1694	0 2½	..	..	44398
March, 1881 .....	152124	2254	0 3	2699	0 4½	..	..	41400
June, " .....	169531	2098	0 2	1759	0 2½	..	..	48127
Sept., " .....	191300	2187	0 2	3600	0 4½	..	..	54764
Dec., " .....	190382	2382	0 3	1238	0 1½	..	..	54648
March, 1882 .....	181358	2486	0 3½	1029	0 1½	..	..	49740
June, " .....	190600	2418	0 3	2488	0 3½	..	..	49724
Sept., " .....	204549	2519	0 2½	3520	0 4½	..	..	52044
Dec., " .....	218500	2675	0 2½	1704	0 1½	..	..	65330
March, 1883 .....	196039	2741	0 3½	1467	0 1½	..	..	66285
June, " .....	208842	2751	0 3	3226	0 3½	..	..	65103
Sept., " .....	230513	2582	0 2½	3011	0 3½	..	..	44265
Dec., " .....	236203	2711	0 2½	2772	0 2½	..	..	55152
March, 1884 .....	222807	2806	0 3	2954	0 3½	..	..	55878
June, " (14 weeks) ..	240710	2944	0 2½	2468	0 2½	..	..	41760
Sept., " .....	235087	2822	0 2½	4468	0 4½	..	..	48207
Dec., " .....	232199	2823	0 2½	2561	0 2½	..	..	65158
March, 1885 .....	216816	2996	0 3½	2913	0 3½	..	..	65563
June, " .....	232467	3145	0 3½	4953	0 5½	..	..	79425
Sept., " .....	240409	2888	0 2½	3462	0 3½	..	..	70555
Dec., " .....	246850	3046	0 2½	3094	0 3	..	..	53546
March, 1886 .....	220254	2827	0 3	3066	0 3½	..	..	46224
June, " .....	223551	2938	0 3½	4453	0 4½	..	..	55673
Sept., " .....	244049	3127	0 3	5281	0 5½	..	..	68142
Dec., " .....	262024	3429	0 3½	5994	0 5½	..	..	71265
March, 1887 .....	229481	3698	0 3½	4094	0 4½	..	..	72351
June, " .....	238169	3608	0 3½	2198	0 2½	..	..	62551
	8237210	110934	0 3½	104347	..	167	..	..
	Less Loss .....			167	..			
	Leaves Net Profit.....			104180	0 3			



# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## NEWCASTLE BRANCH DRAPERY TRADE.

*From the time of commencing to keep a separate Account.*

### QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		Stocks.
		Amount.	Rate.	Amount.	Rate.	
	£	£	s. d.	£	s. d.	£
April, 1876 .....	6990	318	0 10 $\frac{1}{2}$	117	0 4	8696
July " .....	9534	419	0 10 $\frac{1}{2}$	120	0 3	8037
October " (14 weeks) .....	12052	456	0 9 $\frac{1}{2}$	444	0 8 $\frac{1}{2}$	10942
January, 1877 .....	11320	535	0 11 $\frac{1}{2}$	115	0 2 $\frac{7}{8}$	11525
April " .....	12394	537	0 10 $\frac{1}{2}$	386	0 7 $\frac{7}{8}$	11321
July " .....	13707	555	0 9 $\frac{1}{2}$	331	0 5 $\frac{1}{2}$	11142
October " .....	12719	545	0 10 $\frac{1}{2}$	114	0 2 $\frac{1}{2}$	12068
January, 1878 .....	10739	574	1 0 $\frac{1}{2}$	168	0 3 $\frac{3}{8}$	11635
April " .....	10539	554	1 0 $\frac{1}{2}$	213	0 4 $\frac{1}{2}$	11040
July " .....	10563	550	1 0 $\frac{1}{2}$	2	..	9673
October " .....	11834	515	0 10 $\frac{1}{2}$	294	0 5 $\frac{1}{2}$	10331
January, 1879 .....	11225	540	0 11 $\frac{1}{2}$	103	0 2 $\frac{1}{2}$	10463
March " (10 weeks) .....	8592	448	1 0 $\frac{1}{2}$	224	0 6 $\frac{1}{2}$	11404
June " (14 weeks) .....	11025	583	1 0 $\frac{1}{2}$	213	0 4 $\frac{1}{2}$	9531
Sept. 1879 .....	11111	544	0 11 $\frac{1}{2}$	227	0 4 $\frac{1}{2}$	10576
Dec. " .....	13946	578	0 9 $\frac{1}{2}$	207	0 3 $\frac{3}{8}$	11590
March, 1880 .....	14399	622	0 10 $\frac{1}{2}$	548	0 9 $\frac{1}{8}$	15114
June " .....	13770	598	0 10 $\frac{1}{2}$	751	1 1	15773
Sept. " .....	12599	624	0 11 $\frac{1}{2}$	566	0 10 $\frac{1}{2}$	16992
Dec. " .....	15211	650	0 10 $\frac{1}{2}$	341	0 5 $\frac{1}{2}$	16171
March, 1881 .....	15827	666	0 10 $\frac{1}{2}$	601	0 9 $\frac{1}{8}$	15779
June " .....	16949	654	0 9 $\frac{1}{2}$	785	0 11	14972
Sept. " .....	16499	657	0 9 $\frac{1}{2}$	445	0 6 $\frac{1}{2}$	15312
Dec. " .....	19806	679	0 8 $\frac{1}{2}$	508	0 6 $\frac{1}{2}$	16075
March, 1882 .....	18605	711	0 9 $\frac{1}{2}$	943	1 0 $\frac{1}{2}$	16677
June " .....	20018	727	0 8 $\frac{5}{8}$	720	0 8 $\frac{5}{8}$	16358
Sept. " .....	19620	725	0 8 $\frac{5}{8}$	659	0 8	16067
Dec. " .....	26214	812	0 7 $\frac{5}{8}$	1334	1 0 $\frac{1}{2}$	15754
March, 1883 .....	22157	837	0 9	829	0 8 $\frac{5}{8}$	17957
June " .....	24710	830	0 8	1259	1 0 $\frac{1}{2}$	15699
Sept. " .....	22703	842	0 8 $\frac{1}{2}$	925	0 9 $\frac{1}{2}$	18258
Dec. " .....	29784	878	0 7	1486	0 11 $\frac{1}{2}$	16594
March, 1884 .....	26436	907	0 8 $\frac{1}{2}$	991	0 9	18375
June " (14 weeks) .....	29550	1011	0 8 $\frac{5}{8}$	1125	0 9 $\frac{1}{2}$	18062
Sept. " .....	26300	1021	0 9 $\frac{1}{2}$	862	0 7 $\frac{5}{8}$	18470
Dec. " .....	35559	1044	0 7	1525	0 10 $\frac{1}{2}$	18906
March, 1885 .....	33946	1062	0 7 $\frac{1}{2}$	1651	0 11 $\frac{1}{2}$	20675
June " .....	35822	1114	0 7 $\frac{1}{2}$	1671	0 11 $\frac{1}{2}$	22002
Sept. " .....	33776	1104	0 7 $\frac{1}{2}$	1801	1 0 $\frac{1}{2}$	22923
Dec. " .....	39157	1318	0 8	1783	0 10 $\frac{1}{2}$	24084
March, 1886 .....	34600	1274	0 8 $\frac{1}{2}$	1616	0 11 $\frac{1}{2}$	23606
June " .....	39560	1304	0 7 $\frac{1}{2}$	2093	1 0 $\frac{1}{2}$	22461
Sept. " .....	34358	1261	0 8 $\frac{1}{2}$	1743	1 0	26253
Dec. " .....	43115	1503	0 8 $\frac{1}{2}$	2110	0 11 $\frac{1}{2}$	28645
March, 1887 .....	33556	1454	0 10 $\frac{1}{2}$	1414	0 10 $\frac{1}{2}$	29452
June " .....	36689	1514	0 9 $\frac{1}{2}$	1369	0 8 $\frac{1}{2}$	26594
	970885	36654	0 9	37732	0 9 $\frac{1}{2}$	..

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## NEWCASTLE BRANCH BOOT AND SHOE TRADE.

*From the time of commencing to keep a separate Account.*

### QUARTERLY ACCOUNTS.

Date.	Sales.	EXPENSES.		PROFIT.		Loss.		Stocks
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£	s. d.	£
April, 1876.....	5058	149	0 7 <sup>1</sup> / <sub>8</sub>	..	..	110	0 5 <sup>3</sup> / <sub>16</sub>	1154
July ".....	6969	159	0 5 <sup>1</sup> / <sub>2</sub>	284	0 9 <sup>3</sup> / <sub>8</sub>	..	..	1326
October " (14 wks)	8006	179	0 5 <sup>3</sup> / <sub>8</sub>	101	0 3	..	..	1180
January, 1877.....	5346	162	0 7 <sup>1</sup> / <sub>4</sub>	131	0 5 <sup>7</sup> / <sub>8</sub>	..	..	1505
April ".....	6211	170	0 5 <sup>3</sup> / <sub>8</sub>	130	0 5	..	..	1584
July ".....	6871	175	0 6 <sup>3</sup> / <sub>8</sub>	171	0 5 <sup>7</sup> / <sub>8</sub>	..	..	1526
October ".....	8254	207	0 6	266	0 7 <sup>3</sup> / <sub>8</sub>	..	..	1885
January, 1878.....	7089	208	0 7 <sup>1</sup> / <sub>8</sub>	123	0 4 <sup>1</sup> / <sub>8</sub>	..	..	2242
April ".....	6772	210	0 7 <sup>3</sup> / <sub>8</sub>	123	0 4 <sup>3</sup> / <sub>8</sub>	..	..	2577
July ".....	7252	226	0 7 <sup>3</sup> / <sub>8</sub>	57	0 1 <sup>1</sup> / <sub>2</sub>	..	..	3105
October ".....	7441	221	0 7	116	0 3 <sup>3</sup> / <sub>8</sub>	..	..	2080
January, 1879.....	6910	223	0 7 <sup>3</sup> / <sub>4</sub>	14	0 0 <sup>1</sup> / <sub>2</sub>	..	..	3179
March " (10 wks)	5138	193	0 9	25	0 1 <sup>1</sup> / <sub>4</sub>	..	..	3708
June " (14 wks)	6919	245	0 8 <sup>1</sup> / <sub>2</sub>	83	0 2 <sup>1</sup> / <sub>2</sub>	..	..	2587
September ".....	7793	233	0 7 <sup>1</sup> / <sub>4</sub>	103	0 3 <sup>1</sup> / <sub>4</sub>	..	..	2443
December ".....	7918	264	0 8	146	0 4 <sup>3</sup> / <sub>8</sub>	..	..	4681
March, 1880.....	9101	345	0 9	241	0 6 <sup>1</sup> / <sub>8</sub>	..	..	5200
June ".....	8053	325	0 9 <sup>3</sup> / <sub>8</sub>	189	0 5 <sup>3</sup> / <sub>8</sub>	..	..	5737
September ".....	8599	271	0 7 <sup>3</sup> / <sub>8</sub>	174	0 4 <sup>3</sup> / <sub>8</sub>	..	..	4815
December ".....	9215	335	0 8 <sup>3</sup> / <sub>8</sub>	45	0 1 <sup>1</sup> / <sub>4</sub>	..	..	5971
March, 1881.....	9592	329	0 8 <sup>1</sup> / <sub>4</sub>	193	0 4 <sup>3</sup> / <sub>8</sub>	..	..	4632
June ".....	10465	322	0 7 <sup>3</sup> / <sub>8</sub>	58	0 0 <sup>1</sup> / <sub>2</sub>	..	..	5262
Sept. ".....	10958	324	0 7	427	0 9 <sup>3</sup> / <sub>8</sub>	..	..	4372
Dec. ".....	11976	332	0 6 <sup>3</sup> / <sub>8</sub>	230	0 5 <sup>3</sup> / <sub>8</sub>	..	..	4645
March, 1882.....	11988	351	0 7	240	0 4 <sup>3</sup> / <sub>8</sub>	..	..	5110
June ".....	13064	351	0 6 <sup>3</sup> / <sub>8</sub>	416	0 7 <sup>3</sup> / <sub>8</sub>	..	..	5027
Sept. ".....	13672	376	0 6 <sup>3</sup> / <sub>8</sub>	340	0 5 <sup>3</sup> / <sub>8</sub>	..	..	5743
Dec. ".....	15763	449	0 6 <sup>3</sup> / <sub>4</sub>	340	0 5 <sup>1</sup> / <sub>4</sub>	..	..	6561
March, 1883.....	14318	480	0 8	298	0 4 <sup>3</sup> / <sub>8</sub>	..	..	5988
June ".....	16635	477	0 6 <sup>7</sup> / <sub>8</sub>	384	0 5 <sup>3</sup> / <sub>8</sub>	..	..	6013
Sept. ".....	16146	491	0 7 <sup>1</sup> / <sub>4</sub>	544	0 8	..	..	5377
Dec. ".....	18402	507	0 6 <sup>3</sup> / <sub>8</sub>	664	0 8 <sup>3</sup> / <sub>8</sub>	..	..	5817
March, 1884.....	16982	565	0 7 <sup>7</sup> / <sub>8</sub>	335	0 4 <sup>3</sup> / <sub>8</sub>	..	..	6508
June " (14 wks)	19686	589	0 7 <sup>3</sup> / <sub>8</sub>	737	0 8 <sup>7</sup> / <sub>8</sub>	..	..	7740
Sept. ".....	18020	660	0 8 <sup>3</sup> / <sub>8</sub>	352	0 4 <sup>3</sup> / <sub>8</sub>	..	..	7723
Dec. ".....	20366	594	0 6 <sup>5</sup> / <sub>8</sub>	493	0 5 <sup>1</sup> / <sub>4</sub>	..	..	8266
March, 1885.....	20514	621	0 7 <sup>1</sup> / <sub>2</sub>	660	0 7 <sup>1</sup> / <sub>2</sub>	..	..	7877
June ".....	22600	636	0 6 <sup>5</sup> / <sub>8</sub>	612	0 6 <sup>3</sup> / <sub>8</sub>	..	..	8057
Sept. ".....	21646	668	0 7 <sup>1</sup> / <sub>4</sub>	650	0 7 <sup>3</sup> / <sub>8</sub>	..	..	8276
Dec. ".....	24357	858	0 8 <sup>3</sup> / <sub>8</sub>	273	0 2 <sup>3</sup> / <sub>8</sub>	..	..	11319
March, 1886.....	21856	846	0 9 <sup>1</sup> / <sub>4</sub>	408	0 4 <sup>3</sup> / <sub>8</sub>	..	..	10687
June ".....	26262	906	0 8 <sup>1</sup> / <sub>4</sub>	439	0 4	..	..	11686
Sept. ".....	23452	897	0 9 <sup>3</sup> / <sub>8</sub>	495	0 5	..	..	13662
Dec. ".....	25578	997	0 9 <sup>1</sup> / <sub>4</sub>	277	0 2 <sup>3</sup> / <sub>8</sub>	..	..	13442
March, 1887.....	21650	1020	0 11 <sup>1</sup> / <sub>2</sub>	234	0 2 <sup>1</sup> / <sub>2</sub>	..	..	12164
June ".....	22594	999	0 10 <sup>1</sup> / <sub>2</sub>	195	0 2	..	..	13721
	613397	20145	0 7 <sup>7</sup> / <sub>8</sub>	12846	..	110	..	..
	Less Loss .....			110	..			
	Leaves Net Profit.....			12736	0 5			



## THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## LONDON BRANCH GROCERY TRADE.

*From the time of commencing to keep a separate Account.*

## QUARTERLY ACCOUNTS.

Date.	SALES.	EXPENSES.		PROFIT.		Stocks.
		Am't.	Rate.	Amount.	Rate.	
July, 1874 .....	£ 17472	£ 440	s. d. 0 6	£ 331	s. d. 0 4	£ 6623
Oct. " .....	26734	587	0 5 <sup>1</sup> / <sub>2</sub>	68	0 0 <sup>1</sup> / <sub>2</sub>	11089
January, 1875 .....	23179	515	0 4 <sup>1</sup> / <sub>2</sub>	168	0 1 <sup>1</sup> / <sub>2</sub>	7315
April " .....	25966	585	0 5 <sup>1</sup> / <sub>2</sub>	157	0 0 <sup>1</sup> / <sub>2</sub>	4329
July " .....	30695	597	0 4 <sup>1</sup> / <sub>2</sub>	101	0 0 <sup>1</sup> / <sub>2</sub>	4877
October " .....	37126	597	0 3 <sup>1</sup> / <sub>2</sub>	553	0 3 <sup>1</sup> / <sub>2</sub>	5194
January, 1876 .....	36965	586	0 3 <sup>1</sup> / <sub>2</sub>	773	0 5	7219
April " .....	37273	734	0 4 <sup>1</sup> / <sub>2</sub>	609	0 4	4190
July " .....	43039	704	0 3 <sup>1</sup> / <sub>2</sub>	895	0 5	5616
October " (14wks) .....	55687	743	0 3 <sup>1</sup> / <sub>2</sub>	1422	0 6 <sup>1</sup> / <sub>2</sub>	1327
January, 1877 .....	48880	845	0 4 <sup>1</sup> / <sub>2</sub>	1256	0 6 <sup>1</sup> / <sub>2</sub>	12688
April " .....	46783	822	0 4 <sup>3</sup> / <sub>16</sub>	641	0 3 <sup>1</sup> / <sub>2</sub>	8059
July " .....	50612	826	0 3 <sup>1</sup> / <sub>2</sub>	218	0 1	6141
October " .....	62001	811	0 3 <sup>1</sup> / <sub>2</sub>	925	0 3	6597
January, 1878 .....	51019	824	0 3 <sup>1</sup> / <sub>2</sub>	536	0 2	10511
April " .....	48716	815	0 4	605	0 3	9063
July " .....	49307	838	0 4	518	0 2	5933
October " .....	62502	831	0 3 <sup>1</sup> / <sub>2</sub>	551	0 2	8239
January, 1879 .....	55789	897	0 3 <sup>1</sup> / <sub>2</sub>	714	0 3	8489
March " (10 wks) .....	39584	693	0 4 <sup>1</sup> / <sub>2</sub>	482	0 2 <sup>1</sup> / <sub>2</sub>	7917
June " (14 " ) .....	59150	919	0 3 <sup>1</sup> / <sub>2</sub>	837	0 3 <sup>1</sup> / <sub>2</sub>	7833
September, .....	64211	952	0 3	1374	0 5 <sup>1</sup> / <sub>2</sub>	9417
December, .....	69715	1006	0 3 <sup>1</sup> / <sub>2</sub>	2546	0 8 <sup>1</sup> / <sub>2</sub>	13594
March, 1880 .....	60878	980	0 3 <sup>1</sup> / <sub>2</sub>	792	0 3 <sup>1</sup> / <sub>2</sub>	11167
June, " .....	66697	948	0 3 <sup>1</sup> / <sub>2</sub>	1086	0 3 <sup>1</sup> / <sub>2</sub>	9112
September, " .....	76145	951	0 2 <sup>1</sup> / <sub>2</sub>	1088	0 3 <sup>1</sup> / <sub>2</sub>	12386
December " .....	71245	1187	0 4	593	0 2	20789
March, 1881 .....	62706	1528	0 5 <sup>1</sup> / <sub>2</sub>	87	0 0 <sup>1</sup> / <sub>2</sub>	17204
June " .....	67500	1254	0 4 <sup>1</sup> / <sub>2</sub>	610	0 2 <sup>1</sup> / <sub>2</sub>	13227
September " .....	82056	1262	0 3 <sup>1</sup> / <sub>2</sub>	864	0 2 <sup>1</sup> / <sub>2</sub>	12045
December " .....	77486	1266	0 3 <sup>1</sup> / <sub>2</sub>	583	0 1 <sup>1</sup> / <sub>2</sub>	7394
March, 1882 .....	64724	1234	0 4 <sup>1</sup> / <sub>2</sub>	695	0 2 <sup>1</sup> / <sub>2</sub>	6652
June, " .....	66034	1230	0 4 <sup>1</sup> / <sub>2</sub>	900	0 3 <sup>1</sup> / <sub>2</sub>	7615
September " .....	79407	1297	0 3 <sup>1</sup> / <sub>2</sub>	1006	0 3	11636
December " .....	86602	1240	0 3 <sup>1</sup> / <sub>2</sub>	1175	0 3 <sup>1</sup> / <sub>2</sub>	10636
March, 1883 .....	76284	1279	0 4	847	0 2 <sup>1</sup> / <sub>2</sub>	7758
June " .....	76218	1274	0 4	748	0 2 <sup>1</sup> / <sub>2</sub>	8254
September " .....	92723	1288	0 3 <sup>1</sup> / <sub>2</sub>	1482	0 3 <sup>1</sup> / <sub>2</sub>	1353
December " .....	92528	1600	0 4 <sup>1</sup> / <sub>2</sub>	1553	0 4	13282
March, 1884 .....	79833	1440	0 4 <sup>1</sup> / <sub>2</sub>	1357	0 4	12758
June " (14wks) .....	88403	1515	0 4	969	0 2 <sup>1</sup> / <sub>2</sub>	12422
September " .....	100541	1433	0 3 <sup>1</sup> / <sub>2</sub>	1257	0 3	11849
December " .....	107186	1845	0 4 <sup>1</sup> / <sub>2</sub>	1479	0 3 <sup>1</sup> / <sub>2</sub>	18869
March, 1885 .....	94496	1832	0 4 <sup>1</sup> / <sub>2</sub>	2482	0 6 <sup>1</sup> / <sub>2</sub>	18351
June " .....	107506	1797	0 4	2121	0 4 <sup>1</sup> / <sub>2</sub>	16601
Sept. " .....	117471	1822	0 3 <sup>1</sup> / <sub>2</sub>	1845	0 3 <sup>1</sup> / <sub>2</sub>	20042
December " .....	126403	2034	0 3 <sup>1</sup> / <sub>2</sub>	2653	0 5	24256
March, 1886 .....	114451	2094	0 4 <sup>1</sup> / <sub>2</sub>	3195	0 6 <sup>1</sup> / <sub>2</sub>	19629
June " .....	118740	2019	0 4	1934	0 3 <sup>1</sup> / <sub>2</sub>	15310
September " .....	139957	2032	0 3 <sup>1</sup> / <sub>2</sub>	1694	0 2 <sup>1</sup> / <sub>2</sub>	20453
December " .....	154766	2318	0 3 <sup>1</sup> / <sub>2</sub>	2896	0 4 <sup>1</sup> / <sub>2</sub>	24739
March, 1887 .....	138667	2387	0 4 <sup>1</sup> / <sub>2</sub>	1971	0 3 <sup>1</sup> / <sub>2</sub>	27940
June " .....	152416	2686	0 4 <sup>1</sup> / <sub>2</sub>	2130	0 3 <sup>1</sup> / <sub>2</sub>	27026
	3887464	64239	0 3 <sup>1</sup> / <sub>2</sub>	58377	0 3 <sup>1</sup> / <sub>2</sub>	....



# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## LONDON BRANCH DRAPERY, &c., TRADE.

*From the time of commencing to keep a separate Account.*

### QUARTERLY ACCOUNTS.

Date.	SALES.			EXPENSES.		PROFIT.		Stocks.
	Drapery and Furnish-ing.	Boots and Shoes.	Total.	Amount	Rate.	Amount.	Rate.	
	£	£	£	£	s. d.	£	s. d.	£
September, 1880 .....	.....	3366	3366	72	0 5 $\frac{1}{2}$	78	0 5 $\frac{1}{2}$	1215
December, " .....	1657	3134	4791	240	1 0	Loss 42	0 2	3805
March, 1881 .....	2504	2909	5413	306	1 11	do. 92	0 4	4524
June, " .....	2653	3173	5826	307	1 0 $\frac{1}{2}$	Profit 27	0 1	4730
September, " .....	3110	3497	6607	311	0 11 $\frac{1}{2}$	18	0 0 $\frac{1}{2}$	5118
December, " .....	4291	3869	8160	344	0 10 $\frac{1}{2}$	196	0 5 $\frac{1}{2}$	7054
March, 1882 .....	4050	3027	7077	358	1 0 $\frac{1}{2}$	72	0 2 $\frac{1}{2}$	6776
June, " .....	3582	3472	7054	393	1 1 $\frac{1}{2}$	23	0 0 $\frac{1}{2}$	6846
September, " .....	4413	4382	8795	406	0 11	126	0 3 $\frac{1}{2}$	7059
December, " .....	4891	4748	9639	479	0 11 $\frac{1}{2}$	86	0 2 $\frac{1}{2}$	9524
March, 1883 .....	5080	3566	8646	500	1 1 $\frac{1}{2}$	87	0 2 $\frac{1}{2}$	8854
June, " .....	4766	4560	9326	577	1 2 $\frac{1}{2}$	91	0 2 $\frac{1}{2}$	9486
September, " .....	5266	5099	10365	644	1 2 $\frac{1}{2}$	22	0 0 $\frac{1}{2}$	8130
December, " .....	6642	4758	11400	691	1 2 $\frac{1}{2}$	86	0 1 $\frac{1}{2}$	10011
March, 1884 .....	7504	3939	11443	665	1 1 $\frac{1}{2}$	27	0 0 $\frac{1}{2}$	8992
June, " (14 wks) .....	6306	4718	11024	688	1 3	158	0 3 $\frac{1}{2}$	8308
September, " .....	6601	6259	12860	703	1 1 $\frac{1}{2}$	165	0 3	9689
December, " .....	8592	4910	13502	751	1 1 $\frac{1}{2}$	182	0 3 $\frac{1}{2}$	9977
March, 1885 .....	9173	4694	13867	802	1 1 $\frac{1}{2}$	171	0 2 $\frac{1}{2}$	10497
June, " .....	8897	5729	14626	901	1 2 $\frac{1}{2}$	91	0 1 $\frac{1}{2}$	9936
September, " .....	9875	6369	16244	834	1 0 $\frac{1}{2}$	89	0 1 $\frac{1}{2}$	10642
December, " .....	12503	5532	18035	1017	1 1 $\frac{1}{2}$	333	0 4 $\frac{1}{2}$	11502
March, 1886 .....	12994	5402	18396	1065	1 1 $\frac{1}{2}$	223	0 2 $\frac{1}{2}$	11102
June, " .....	12257	5939	18196	1127	1 2 $\frac{1}{2}$	15	0 0 $\frac{1}{2}$	11034
September, " .....	13005	7541	20546	1107	1 0 $\frac{1}{2}$	166	0 1 $\frac{1}{2}$	12366
December, " .....	15493	7208	22701	1230	1 1	372	0 3 $\frac{1}{2}$	13713
March, 1887 .....	14158	5838	19996	1228	1 2 $\frac{1}{2}$	Loss 65	0 0 $\frac{1}{2}$	16022
June, " .....	15689	6503	22192	1318	1 2 $\frac{1}{2}$	Profit 97	0 1	15710
	205952	134141	340093	19064	1 1 $\frac{1}{2}$	2807	0 1 $\frac{1}{2}$	....

## THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## CRUMPSALL BISCUIT WORKS TRADE.

*From the time of commencing to keep a separate Account.*

## QUARTERLY ACCOUNTS.

Date.	Net Supplies.	Pro- duction	EXPENSES.				RATE ON PRODUCTION.		NET PROFIT.		Stocks
			Sundry.	Depre- ciation.	Interest	Total.	Per Cent.	Per £.	Amount	Rate per £	
	£	£	£	£	£	£	£ s. d.	s. d.	£	s. d.	£
January, 1874..	2987	2878	604	60	87	751	26 1 10	5 2½	15	0 1½	1678
April „ „	2814	2790	506	68	92	666	23 18 1	4 9	61	0 5½	1964
July „ „	3450	3426	502	80	124	706	20 11 6	4 1½	192	1 1½	1967
October „ „	3560	3538	585	87	132	804	22 13 11	4 6½	loss 16	0 1	1887
January, 1875..	3365	3370	597	88	147	832	24 13 9	4 11	do. 9	0 0½	2029
April „ „	3575	3500	598	79	91	768	21 18 6	4 4	265	1 5½	2137
July „ „	3529	3260	610	80	99	789	24 4 0	4 10	208	1 2½	1656
October „ „	3380	3301	676	81	90	847	25 13 2	5 1	94	0 6½	1433
January, 1876..	3180	3331	631	84	91	806	24 3 4	4 10	145	0 11	1538
April „ „	3187	3093	956	90	101	1147	37 1 8	7 5½	13	0 1	2222
July „ „	4659	4913	888	98	111	1097	22 6 1	4 5	221	0 11½	1972
*October „ „	4975	5039	789	103	113	1005	19 18 9	3 11	332	1 4	2295
January, 1877..	3045	3015	649	107	116	872	28 18 5	5 9	64	0 5	2367
April „ „	3879	4177	704	109	129	942	22 11 0	4 6	44	0 2½	3067
July „ „	4442	4503	629	110	132	871	19 6 10	3 10	17	0 1	2919
October „ „	5521	5158	740	111	118	969	18 16 0	3 9	115	0 5½	2591
January, 1878..	4176	4288	599	114	121	834	19 9 0	3 10½	338	1 7½	2961
April „ „	4115	3732	665	114	127	906	24 6 0	4 10½	313	1 6½	3003
July „ „	4217	4144	620	114	120	854	20 12 2	4 1	191	1 0	2608
October „ „	5109	5229	821	114	118	1053	20 2 9	4 0½	614	2 5½	2524
January, 1879..	4112	4184	692	139	116	947	22 12 8	4 6½	400	1 10½	2506
†March „ „	2953	2701	550	106	91	747	27 13 3	5 6½	181	1 4	2687
*June „ „	4515	4512	812	148	124	1084	24 0 2	4 9½	168	0 8½	2614
September „ „	4716	4677	781	139	114	1034	22 2 2	4 5	303	1 3	2317
December „ „	4439	4564	709	139	118	966	21 2 10	4 2½	352	1 6	2335
March, 1880..	4277	4268	799	139	107	1045	24 9 8	4 10½	loss 12	0 0½	2540
June „ „	4550	4546	676	143	109	928	20 8 3	4 1	238	1 3½	2439
September „ „	5227	5107	750	145	109	1004	19 13 2	3 11½	389	1 6½	1948
December „ „	5099	5148	760	145	104	1009	19 12 0	3 11	318	1 2½	1793
March, 1881..	4024	4156	703	144	106	953	22 18 7	4 7	165	0 9½	2038
June „ „	4863	4727	767	144	111	1022	21 12 4	4 3½	45	0 2½	2464
September „ „	5823	6046	835	144	109	1088	18 0 0	3 7½	471	1 6½	2183
December „ „	5412	5345	751	144	103	998	18 13 2	3 8½	206	0 9½	2105
March, 1882..	4793	4725	771	144	104	1019	21 11 4	4 3½	265	1 1½	1899
June „ „	5064	4975	772	144	101	1017	20 8 10	4 1	164	0 7½	2138
September „ „	5860	5921	777	144	99	1020	17 4 6	3 5½	632	2 1½	2089
December „ „	5975	5957	775	146	97	1018	17 1 10	3 5	437	1 5½	1703
March, 1883..	4838	5245	756	147	103	1006	19 3 7	3 10	496	1 10½	2399
June „ „	5407	5100	828	147	105	1080	21 3 6	4 2½	169	0 7½	2299
September „ „	5915	5580	860	147	101	1108	19 17 1	3 11½	630	2 5	2076
December „ „	5737	5787	784	148	99	1031	17 16 3	3 6½	786	2 8½	1896
March, 1884..	4740	4920	884	148	105	1137	23 2 2	4 7½	190	0 9½	3201
*June „ „	5409	5098	997	153	103	1263	24 15 5	4 11½	345	1 4½	2425
September „ „	5828	5965	1094	177	117	1388	23 5 4	4 7½	609	2 0½	2111
December „ „	5572	5582	866	182	100	1148	20 11 4	4 1½	886	3 2	2129
March, 1885..	4438	4600	1114	190	110	1414	30 14 9	6 1½	94	0 4½	2707
June „ „	5514	5213	1168	192	107	1467	23 2 9	5 7½	233	1 1	3154
September „ „	5762	6250	1339	202	117	1658	26 10 6	5 3½	304	0 11½	3604
December „ „	5765	5767	1173	202	120	1495	25 18 5½	5 2½	810	2 9½	3534
March, 1886..	5133	5092	1242	202	123	1567	30 15 5	6 1½	48	0 2½	3747
June „ „	5494	5698	1322	207	119	1648	28 18 5	5 9½	115	0 5	3960
September „ „	5920	6060	1695	207	124	2026	33 8 7½	6 8½	loss 258	0 10½	4479
December „ „	6987	6035	1556	281	163	2000	33 2 9½	6 7½	34	0 1½	4207
March, 1887..	6311	6637	1409	285	161	1855	27 18 11½	5 7	215	0 8½	4285
June „ „	6602	6035	1512	313	196	2021	33 9 9	6 8½	loss 191	0 6½	4396
	260179	258913	46648	7823	6259	60730	23 9 1½	4 8½	14052	..	..
							Less Loss.....		486	..	..
							Leaves Net Profit .....		13566	1 0½	..

\* Fourteen Weeks. † Ten Weeks.



**THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.**  
**HECKMONDWIKE BOOT AND SHOE WORKS TRADE.**  
*From its Commencement.—QUARTERLY ACCOUNTS.*

Date.	Net Sup- plies.	Produc- tion.	EXPENSES.			RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks.
			Sundry.	Depre- ciation.	Interest	Total.	Per cent.		Per £.	Amount	Rate.	
							£	s. d.				
Sept., 1880.....	£ 711	£ 732	£ 225	£ 3	£ 1	£ 229	81	s. d. 5 8	£	s. d. 0 37	£ 1856	
Dec., " .....	2349	2706	832	13	29	874	32	5 11½	169	1 27	2473	
March, 1881.....	2808	3052	942	14	33	989	82	8 1	196	1 8½	2293	
June, " .....	1913	2478	800	14	42	856	83	10 10	139	1 11½	3637	
Sept., " .....	2807	2467	761	14	48	823	83	7 2½	244	1 11½	3136	
Dec., " .....	3623	3420	1089	15	34	1138	83	5 5½	29	0 2	2238	
March, 1882.....	3548	3608	1125	16	46	1187	82	17 11½	8	0 0½	2934	
June, " .....	2986	2909	1102	16	42	1160	89	17 6½	63	0 5½	3186	
Sept., " .....	2923	3087	1161	17	48	1226	83	5 0½	94	0 6	3996	
Dec., " .....	5145	5250	1653	17	47	1717	32	14 1	124	0 5½	4016	
March, 1883.....	3899	4130	1307	17	54	1378	83	7 3½	45	0 2½	5104	
June, " .....	2901	2696	994	17	61	1072	89	15 8	59	0 4½	5111	
Sept., " .....	3948	3933	1325	17	60	1402	85	13 3½	107	0 6½	4385	
Dec., " .....	5913	5618	1809	17	47	1873	33	6 9½	92	0 3½	3950	
March, 1884.....	4559	4652	1392	17	51	1460	81	6 4	139	0 7½	4461	
June, " (14 weeks) ..	3169	3179	1138	19	53	1210	88	1 3	35	0 2½	3916	
Sept., " .....	4334	4169	1373	16	61	1450	34	15 5	131	0 7½	3131	
Dec., " .....	6153	6128	2021	42	55	2118	34	11 3	244	0 9½	3506	
March, 1885.....	5595	5556	1859	42	58	1959	35	5 2	6	0 0½	3934	
June, " .....	3878	3968	1526	44	67	1637	41	5 1	27	0 1½	4774	
Sept., " .....	5254	5800	1895	45	68	2008	34	12 4½	71	0 2½	5056	
Dec., " .....	7939	8487	2552	45	63	2660	31	6 10	157	0 4½	5314	
March, 1886.....	5893	5960	2153	45	77	2275	38	3 5	66	0 2½	6171	
June, " .....	3754	6171	1937	74	105	2116	84	5 9½	3	0 1½	8402	
Sept., " .....	5646	5395	1730	74	120	1924	35	13 3	287	1 0½	8445	
Dec., " .....	6938	5892	2047	74	103	2224	37	14 11	151	0 5½	6369	
March, 1887.....	4338	5335	1555	74	100	1729	32	8 2	138	0 6½	6733	
June, " .....	3936	3248	1271	74	96	1441	44	7 3½	40	0 2½	6155	
	117360	120636	39574	892	1669	42135	34	18 6½ Less	1517 1350	.... ....	....	
							Leaves Profit ..		167	0 0½		



## THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## LEICESTER BOOT AND SHOE WORKS TRADE.

*From the time of commencing to keep a separate Account.*

## QUARTERLY ACCOUNTS.

Date.	Net Sup- plies.	Produc- tion.	EXPENSES.			
			Sundry.	Depre- ciation.	Interest.	Total.
	£	£	£	£	£	£
January, 1874 .....	3422	5190	1281	6	29	1316
April " .....	4506	10794	1512	7	42	1561
July " .....	7737	10120	2673	7	77	2757
October, " .....	8065	8323	2671	10	101	2782
January, 1875 .....	9148	9447	3191	12	122	3325
April " .....	11023	10381	3461	29	107	3597
July " .....	13987	14610	4320	34	127	4481
October, " .....	15413	15349	4863	30	156	5049
January, 1876 .....	13265	13362	4292	31	153	4476
April " .....	13602	11642	4190	31	151	4372
July " .....	15214	17921	5104	32	166	5302
*October " .....	19813	16419	6209	87	224	6520
January, 1877 .....	14076	14122	5128	96	239	5463
April " .....	15870	14869	4968	102	268	5338
July " .....	19155	19653	6673	104	275	7052
October " .....	18551	18119	6042	105	247	6394
January, 1878 .....	17564	14962	5674	105	233	6012
April " .....	15671	17902	5591	105	267	5963
July " .....	22014	18840	7423	106	259	7788
October " .....	18226	17154	5718	106	234	6058
January, 1879 .....	17970	19043	7170	107	238	7515
+March " .....	12947	15196	5025	82	187	5294
*June " .....	21462	19585	6896	117	254	7267
Septembr " .....	19379	19389	7325	109	216	7650
December, " .....	23688	23576	8770	109	288	9167
March, 1880 .....	20675	24392	8445	110	348	8903
June " .....	23571	20933	7004	110	310	7424
Septembr " .....	18670	17610	6602	112	304	7018
December, " .....	21739	21494	7815	112	279	8206
March, 1881 .....	16827	20698	6775	112	298	7185
June " .....	26921	23471	8772	112	271	9155
Septembr " .....	20723	21174	7834	112	261	8207
December, " .....	23136	23807	9301	112	257	9670
March, 1882 .....	19610	22487	8163	123	311	8597
June " .....	27552	25002	8808	122	276	9206
Septembr " .....	26787	26702	9702	124	268	10094
December, " .....	25149	25326	9715	126	258	10099
March, 1883 .....	21493	22090	8278	124	312	8714
June " .....	25255	22929	8499	124	273	8896
Septembr " .....	21777	20418	7880	124	228	8232
December, " .....	23461	24777	9211	139	227	9577
March, 1884 .....	21478	25093	8729	141	254	9124
*June " .....	32190	31418	11336	179	323	11338
Septembr " .....	29282	25995	9946	252	371	10569
December, " .....	24216	23827	9226	266	319	9811
March, 1885 .....	26769	27876	9905	268	349	10522
June " .....	30729	30386	11109	269	332	11710
Septembr " .....	26076	24106	9330	270	325	9925
December, " .....	25890	25438	9502	270	309	10081
March, 1886 .....	26923	32001	11057	276	340	11673
June " .....	41536	38021	13750	276	313	14339
Septembr " .....	27976	26874	9718	276	298	10292
December, " .....	26028	26007	10206	276	293	10775
March, 1887 .....	30476	34990	11855	280	340	12475
June " .....	39272	34884	12881	280	298	13459
	1143454	1145994	407524	7146	13605	428275

\* Fourteen Weeks.

† Ten Weeks.

## THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## LEICESTER BOOT AND SHOE WORKS TRADE.—Continued.

From the time of commencing to keep a separate Account.

## QUARTERLY ACCOUNTS.

Date.	RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks.
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
January, 1874.....	25 6 8	5 0 <sup>3</sup> / <sub>4</sub>	..	..	8	C 0 <sup>1</sup> / <sub>2</sub>	2579
April     ".....	20 14 9	4 6 <sup>1</sup> / <sub>4</sub>	108	0 5 <sup>1</sup> / <sub>2</sub>	..	..	2504
July       ".....	27 4 8	5 5 <sup>1</sup> / <sub>2</sub>	111	0 3 <sup>1</sup> / <sub>2</sub>	..	..	4366
October   ".....	33 8 6	6 8 <sup>1</sup> / <sub>4</sub>	373	0 11 <sup>1</sup> / <sub>8</sub>	..	..	5716
January, 1885.....	35 3 11	7 0 <sup>1</sup> / <sub>2</sub>	..	..	8	0 0 <sup>1</sup> / <sub>4</sub>	6466
April       ".....	34 13 6	6 11 <sup>1</sup> / <sub>4</sub>	..	..	175	0 3 <sup>1</sup> / <sub>2</sub>	6956
July       ".....	30 13 5	6 1 <sup>1</sup> / <sub>2</sub>	1153	1 5 <sup>1</sup> / <sub>2</sub>	..	..	8809
October   ".....	32 17 10	6 7	..	..	174	0 2 <sup>3</sup> / <sub>8</sub>	10773
January, 1876.....	33 10 0	6 8 <sup>1</sup> / <sub>4</sub>	103	0 2	..	..	9186
April       ".....	37 10 11	7 6	226	0 4	..	..	10025
July       ".....	29 11 8	5 11	165	0 2 <sup>3</sup> / <sub>8</sub>	..	..	11149
*October   ".....	39 14 1	7 11 <sup>1</sup> / <sub>4</sub>	629	0 7 <sup>1</sup> / <sub>16</sub>	..	..	12677
January, 1877.....	38 13 8	7 8 <sup>3</sup> / <sub>4</sub>	..	..	134	0 2 <sup>1</sup> / <sub>4</sub>	14131
April       ".....	35 18 0	7 2 <sup>1</sup> / <sub>4</sub>	..	..	23	0 0 <sup>1</sup> / <sub>2</sub>	13013
July       ".....	35 17 8	7 2 <sup>1</sup> / <sub>4</sub>	496	0 6	..	..	15634
October   ".....	35 5 8	7 0 <sup>1</sup> / <sub>2</sub>	17	0 0 <sup>3</sup> / <sub>16</sub>	..	..	16692
January, 1878.....	40 3 8	8 0 <sup>1</sup> / <sub>2</sub>	..	..	279	0 3 <sup>1</sup> / <sub>16</sub>	12922
April       ".....	33 6 3	6 8	79	0 1 <sup>1</sup> / <sub>2</sub>	..	..	15104
July       ".....	41 6 9	8 3 <sup>1</sup> / <sub>2</sub>	665	0 7 <sup>1</sup> / <sub>2</sub>	..	..	14416
October   ".....	35 5 5	7 0 <sup>1</sup> / <sub>2</sub>	807	0 10 <sup>1</sup> / <sub>4</sub>	..	..	14495
January, 1879.....	39 9 3	7 10 <sup>3</sup> / <sub>4</sub>	24	0 3 <sup>1</sup> / <sub>4</sub>	..	..	14515
†March     ".....	34 16 9	6 11 <sup>1</sup> / <sub>2</sub>	351	0 5 <sup>1</sup> / <sub>2</sub>	..	..	16649
*June       ".....	37 2 1	7 5	..	..	84	0 1	11456
September ".....	39 9 4	7 10 <sup>3</sup> / <sub>4</sub>	954	0 11 <sup>1</sup> / <sub>2</sub>	..	..	10996
December   ".....	38 17 6	7 9 <sup>1</sup> / <sub>4</sub>	424	0 4 <sup>1</sup> / <sub>4</sub>	..	..	24733
March, 1880.....	36 10 0	7 3 <sup>1</sup> / <sub>2</sub>	..	..	156	0 1 <sup>1</sup> / <sub>2</sub>	23888
June       ".....	35 9 1	7 1 <sup>1</sup> / <sub>2</sub>	760	0 8 <sup>3</sup> / <sub>8</sub>	..	..	20330
September ".....	39 17 0	7 11 <sup>1</sup> / <sub>2</sub>	248	0 3 <sup>3</sup> / <sub>8</sub>	..	..	14662
December   ".....	38 3 6	7 7 <sup>1</sup> / <sub>4</sub>	..	..	1161	1 0 <sup>7</sup> / <sub>8</sub>	15772
March, 1881.....	34 14 3	6 11 <sup>1</sup> / <sub>4</sub>	934	0 10 <sup>1</sup> / <sub>4</sub>	..	..	19945
June       ".....	39 0 1	7 9 <sup>1</sup> / <sub>2</sub>	63	0 0 <sup>1</sup> / <sub>2</sub>	..	..	15048
September ".....	38 15 2	7 9	410	0 4 <sup>3</sup> / <sub>8</sub>	..	..	16310
December   ".....	40 12 2	8 1 <sup>1</sup> / <sub>2</sub>	..	..	955	0 9 <sup>3</sup> / <sub>8</sub>	15594
March, 1882.....	38 4 7	7 8	339	0 3 <sup>3</sup> / <sub>8</sub>	..	..	20370
June       ".....	36 16 5	7 4 <sup>1</sup> / <sub>4</sub>	593	0 5 <sup>3</sup> / <sub>8</sub>	..	..	15241
September ".....	37 16 0	7 6 <sup>3</sup> / <sub>8</sub>	417	0 3 <sup>3</sup> / <sub>8</sub>	..	..	13437
December   ".....	39 17 6	7 11 <sup>1</sup> / <sub>2</sub>	300	0 2 <sup>1</sup> / <sub>4</sub>	..	..	14192
March, 1883.....	39 8 11	7 10 <sup>3</sup> / <sub>4</sub>	..	..	341	0 3 <sup>3</sup> / <sub>8</sub>	18248
June       ".....	38 15 11	7 9	£99	0 4 <sup>1</sup> / <sub>2</sub>	..	..	13038
September ".....	40 6 4 <sup>1</sup> / <sub>2</sub>	8 0 <sup>3</sup> / <sub>4</sub>	58	0 0 <sup>3</sup> / <sub>4</sub>	..	..	10389
December   ".....	38 13 0	7 8 <sup>1</sup> / <sub>4</sub>	74	0 0 <sup>3</sup> / <sub>4</sub>	..	..	10384
March, 1884.....	36 7 2	7 3 <sup>1</sup> / <sub>4</sub>	886	0 8 <sup>3</sup> / <sub>8</sub>	..	..	15796
*June       ".....	37 13 6	7 6 <sup>3</sup> / <sub>8</sub>	1730	1 1 <sup>1</sup> / <sub>2</sub>	..	..	19049
September ".....	40 13 2	8 1 <sup>1</sup> / <sub>2</sub>	743	0 6 <sup>3</sup> / <sub>8</sub>	..	..	16274
December   ".....	41 3 5	8 2 <sup>3</sup> / <sub>4</sub>	..	..	98	0 0 <sup>7</sup> / <sub>8</sub>	17800
March, 1885.....	37 14 11	7 6 <sup>3</sup> / <sub>8</sub>	517	0 4 <sup>3</sup> / <sub>8</sub>	..	..	18374
June       ".....	38 10 9	7 8 <sup>1</sup> / <sub>4</sub>	1241	0 9 <sup>1</sup> / <sub>2</sub>	..	..	17401
September ".....	41 3 5 <sup>1</sup> / <sub>2</sub>	8 2 <sup>1</sup> / <sub>4</sub>	296	0 2 <sup>1</sup> / <sub>4</sub>	..	..	16116
December   ".....	39 12 7	7 11 <sup>1</sup> / <sub>2</sub>	1024	0 9 <sup>1</sup> / <sub>2</sub>	..	..	15752
March, 1886.....	36 9 6	7 3 <sup>1</sup> / <sub>4</sub>	688	0 5 <sup>1</sup> / <sub>2</sub>	..	..	20081
June       ".....	37 14 3	7 6 <sup>3</sup> / <sub>8</sub>	2725	1 3 <sup>1</sup> / <sub>2</sub>	..	..	16020
September ".....	38 11 8 <sup>1</sup> / <sub>4</sub>	7 8 <sup>1</sup> / <sub>4</sub>	2121	1 6 <sup>1</sup> / <sub>4</sub>	..	..	16266
December   ".....	41 8 7 <sup>3</sup> / <sub>8</sub>	8 3 <sup>3</sup> / <sub>8</sub>	525	0 4 <sup>3</sup> / <sub>8</sub>	..	..	17736
March, 1887.....	35 13 0	7 1 <sup>1</sup> / <sub>2</sub>	1337	0 10 <sup>1</sup> / <sub>4</sub>	..	..	23050
June       ".....	38 11 7 <sup>3</sup> / <sub>8</sub>	7 8 <sup>1</sup> / <sub>2</sub>	2631	1 4 <sup>1</sup> / <sub>2</sub>	..	..	19075
	37 7 5 <sup>1</sup> / <sub>8</sub>	7 5 <sup>1</sup> / <sub>8</sub>	27799	..	3596	..	..
	Less Loss .....		3596	..			
	Leaves Net Profit ..		24203	0 5			



## THE CO-OPERATIVE WHOLESALE

## DURHAM SOAP WORKS SUPPLIES,

*From its Commencement,*

Date.	Net Sup- plies.	Pro- duction.	EXPENSES.			
			Sundry.	Depre- ciation.	Interest.	Total.
	£	£	£	£	£	£
October, 1874 .....	161	818	32	38	4	74
January, 1875 .....	1938	2163	98	37	81	216
April " .....	2510	2540	117	38	54	209
July " .....	2620	2143	123	39	49	216
October " .....	1874	2484	139	39	54	232
January, 1876 .....	2260	2142	123	39	56	223
April " .....	2657	2772	113	39	55	207
July " .....	2560	2523	115	39	57	211
*October " .....	2550	2146	125	39	69	233
January, 1877 .....	1782	2284	135	60	90	285
April " .....	2371	2621	134	71	105	310
July " .....	2801	2653	144	82	121	347
October " .....	2724	3388	196	89	108	393
January, 1878 .....	3202	3251	210	94	114	418
April " .....	3085	3421	310	98	125	533
July " .....	3070	2660	191	98	125	414
October " .....	2947	2868	194	74	89	357
January, 1879 .....	2633	2220	188	75	91	354
*March " .....	2032	2326	159	56	70	285
†June " .....	2582	2726	203	77	96	376
September " .....	2076	1912	169	72	92	333
December " .....	2213	2423	184	72	91	347
March, 1880 .....	2388	2055	199	72	85	356
June " .....	3095	3040	175	72	81	328
September " .....	3216	2937	193	73	79	345
December " .....	3031	3372	214	72	78	364
March, 1881 .....	2656	2757	227	73	93	393
June " .....	3254	3411	173	73	87	333
September " .....	3230	3340	199	73	97	369
December " .....	2731	2757	243	73	99	415
March, 1882 .....	3336	3129	212	73	72	357
June " .....	3480	3815	212	73	98	383
September " .....	3282	2795	179	73	100	352
December " .....	2703	2765	192	73	80	345
March, 1883 .....	3089	3479	197	73	83	353
June " .....	3237	3251	188	73	92	353
September " .....	4426	5099	267	73	85	425
December " .....	3999	4112	258	80	99	437
March, 1884 .....	3855	3799	213	80	96	389
*June " .....	3854	3659	224	87	99	410
September " .....	4008	3625	214	80	82	376
December " .....	3502	3633	198	80	66	344
March, 1885 .....	4369	4311	243	80	66	389
June " .....	4691	4652	255	80	75	410
September " .....	4722	4702	266	80	84	430
December " .....	4129	4329	353	80	75	508
March, 1886 .....	3552	3727	253	80	71	404
June " .....	4220	3979	286	80	61	427
September " .....	4344	3768	329	80	61	470
December " .....	3760	4309	755	80	59	894
March, 1887 .....	3435	3394	341	80	70	491
June, " .....	3255	3066	312	80	59	451
* Fourteen Weeks.	159507	161551	10982	3664	4228	18374
† Ten Weeks.						



## SOCIETY LIMITED.

## EXPENSES, PROFIT, AND STOCKS,

## QUARTERLY ACCOUNTS.

Date.	RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks.
	Per cent.	Per £.	Amount.	Rate.	Amount.	Rate.	
October, 1874 ..	£ s. d.	s. d.	£	s. d.	£	s. d.	£
January, 1875 ..	9 2 0	1 9 $\frac{3}{4}$	..	..	108	13 4 $\frac{3}{4}$	804
April, ..	9 19 8	1 11 $\frac{3}{4}$	127	1 3 $\frac{1}{2}$	..	..	1809
July, ..	8 4 7	1 7 $\frac{3}{4}$	82	0 7 $\frac{3}{4}$	..	..	1007
October, ..	10 1 7	2 0 $\frac{1}{4}$	182	1 4	..	..	1010
January, 1876 ..	9 6 0	1 10 $\frac{1}{4}$	92	0 11 $\frac{1}{4}$	..	..	1751
April, ..	10 8 2	2 1	..	..	120	1 0 $\frac{3}{4}$	1303
July, ..	7 9 4	1 6	11	0 1	..	..	1462
*October, ..	8 7 3	1 8	97	0 9	..	..	2262
January, 1877 ..	10 7 1	2 2	..	..	23	0 2	3029
April, ..	12 9 7	2 6	106	1 2 $\frac{1}{2}$	..	..	3871
July, ..	11 16 7	2 4 $\frac{1}{2}$	..	..	177	1 5 $\frac{7}{8}$	3401
October, ..	13 1 7	2 7 $\frac{1}{4}$	105	0 9	..	..	4353
January, 1878 ..	11 12 0	2 4 $\frac{1}{2}$	..	..	147	1 1	3289
April, ..	12 17 2	2 7	..	..	88	0 6 $\frac{3}{4}$	3721
July, ..	15 11 7	3 1	..	..	142	0 10 $\frac{1}{2}$	4495
October, ..	15 11 3	3 1	..	..	283	2 2 $\frac{1}{2}$	3947
January, 1879 ..	12 8 11	2 5 $\frac{3}{4}$	..	..	109	0 11	3374
*March, ..	15 18 11	3 2 $\frac{1}{2}$	..	..	136	0 2 $\frac{1}{2}$	3130
†June, ..	12 4 9	2 5	77	0 7 $\frac{7}{8}$	..	..	2705
September, ..	13 15 10	2 9	..	..	..	..	3657
December, ..	17 8 3	3 5 $\frac{3}{4}$	..	..	238	2 5 $\frac{3}{4}$	3536
March, 1880 ..	14 6 4	2 10 $\frac{1}{4}$	46	0 4 $\frac{1}{2}$	..	..	3769
June, ..	17 6 5	3 5 $\frac{5}{8}$	7	0 0 $\frac{1}{8}$	..	..	2680
September, ..	10 15 1	2 17 $\frac{1}{8}$	..	..	63	0 5	2786
December, ..	11 14 11	2 4 $\frac{1}{8}$	170	1 17 $\frac{1}{8}$	..	..	2238
March, 1881 ..	10 15 10	2 2	24	0 1 $\frac{1}{2}$	..	..	3571
June, ..	14 5 1	2 10 $\frac{1}{4}$	85	0 7 $\frac{1}{2}$	..	..	3426
September, ..	9 15 3	1 11 $\frac{1}{8}$	117	0 8 $\frac{1}{8}$	..	..	3466
December, ..	11 0 11	2 2 $\frac{1}{2}$	..	..	16	0 1	5369
March, 1882 ..	15 1 0	3 0 $\frac{1}{2}$	..	..	54	0 4 $\frac{5}{8}$	3707
June, ..	11 8 2	2 3 $\frac{1}{2}$	57	0 4 $\frac{3}{8}$	..	..	2834
September, ..	10 0 9	2 0	..	..	113	0 7	5405
December, ..	12 11 10	2 6 $\frac{1}{8}$	40	0 3 $\frac{3}{8}$	..	..	3807
March, 1883 ..	12 9 6	2 6	..	..	83	0 7 $\frac{1}{8}$	2628
June, ..	10 2 10	2 0 $\frac{1}{4}$	..	..	38	0 2 $\frac{1}{2}$	5047
September, ..	10 17 1	2 2	44	0 3 $\frac{1}{2}$	..	..	3838
December, ..	8 6 9 $\frac{3}{4}$	1 8	16	0 0 $\frac{5}{8}$	..	..	3990
March, 1884 ..	10 12 6 $\frac{1}{2}$	2 1 $\frac{1}{2}$	40	0 2 $\frac{1}{4}$	..	..	5185
June, ..	10 4 9	2 0 $\frac{1}{2}$	29	0 1 $\frac{1}{2}$	..	..	4594
*September, ..	11 4 1	2 2 $\frac{1}{8}$	..	..	53	0 3 $\frac{3}{8}$	4323
December, ..	10 7 5	2 0 $\frac{1}{4}$	59	0 3 $\frac{7}{8}$	..	..	2936
March, 1885 ..	9 9 1	1 10 $\frac{1}{8}$	62	0 4	..	..	3489
June, ..	9 0 5 $\frac{1}{2}$	1 9 $\frac{3}{8}$	65	0 3 $\frac{3}{8}$	..	..	3151
September, ..	8 16 3	1 9 $\frac{1}{2}$	294	1 3 $\frac{1}{2}$	..	..	6282
December, ..	9 2 10 $\frac{3}{4}$	1 9 $\frac{1}{2}$	292	1 2 $\frac{1}{2}$	..	..	4458
March, 1886 ..	11 14 8 $\frac{1}{4}$	2 4 $\frac{1}{8}$	256	1 2 $\frac{1}{8}$	..	..	4361
June, ..	10 16 9 $\frac{1}{2}$	2 2	288	1 6 $\frac{1}{2}$	..	..	3373
September, ..	10 14 7 $\frac{1}{2}$	2 1 $\frac{1}{4}$	209	0 11 $\frac{1}{4}$	..	..	3198
December, ..	12 9 5 $\frac{1}{2}$	2 5 $\frac{1}{4}$	216	0 11 $\frac{1}{4}$	..	..	2707
March, 1887 ..	20 14 5 $\frac{1}{4}$	4 1 $\frac{1}{4}$	28	0 1 $\frac{1}{4}$	..	..	3999
June, ..	14 9 4	2 10 $\frac{1}{8}$	210	1 2 $\frac{1}{8}$	..	..	4685
	14 14 2 $\frac{1}{4}$	2 11 $\frac{1}{4}$	92	0 6 $\frac{1}{4}$	..	..	3756
	11 13 7 $\frac{7}{8}$	2 4	3625	..	1991	..	..
	Less Loss .....		1991	..			
	Leaves Profit .....		1634	0 2 $\frac{3}{4}$			

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER GROCERY AND PROVISION SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

### YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Stocks.
		Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£
January, 1875 (3 quarters) .....	1110155	11716	0 2 $\frac{1}{2}$	11986	0 2 $\frac{1}{2}$	71960
" 1876 .....	1476536	14701	0 2 $\frac{1}{2}$	19042	0 3	56487
" 1877 (53 weeks) .....	1707637	17692	0 2 $\frac{1}{2}$	27993	0 3 $\frac{1}{2}$	68205
" 1878 .....	1761017	16866	0 2 $\frac{1}{2}$	25745	0 3 $\frac{1}{2}$	58790
" 1879 .....	1683613	17373	0 2 $\frac{1}{2}$	26502	0 3 $\frac{1}{2}$	55319
December, 1879 (50 weeks) .....	1590007	16761	0 2 $\frac{1}{2}$	28826	0 4 $\frac{1}{2}$	71446
" 1880 .....	1998384	18911	0 2 $\frac{1}{2}$	30977	0 3 $\frac{1}{2}$	70091
" 1881 .....	2047210	19883	0 2 $\frac{1}{2}$	32460	0 3 $\frac{1}{2}$	87277
" 1882 .....	2298350	23666	0 2 $\frac{1}{2}$	30644	0 3 $\frac{1}{2}$	141191
" 1883 .....	2544409	28337	0 2 $\frac{1}{2}$	27455	0 2 $\frac{1}{2}$	109414
" 1884 (53 weeks) .....	2457288	28522	0 2 $\frac{1}{2}$	24893	0 2 $\frac{1}{2}$	107524
" 1885 .....	2375945	27484	0 2 $\frac{1}{2}$	41757	0 4 $\frac{1}{2}$	92790
" 1886 .....	2571435	29777	0 2 $\frac{1}{2}$	41381	0 3 $\frac{1}{2}$	118620
	25621986	271689	0 2 $\frac{1}{2}$	369661	0 3 $\frac{1}{2}$	..

## MANCHESTER DRAPERY AND WOOLLEN CLOTH SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

### YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Loss.		Stocks.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£	s. d.	£
Jan., 1874 (1 quarter)..	10575	348	0 8	201	0 4 $\frac{9}{16}$	....	....	11568
" 1875.....	71290	3872	1 1	1244	0 4 $\frac{1}{8}$	....	....	36824
" 1876.....	129486	7264	1 1 $\frac{1}{2}$	720	0 1 $\frac{1}{4}$	....	....	72408
" 1877 (53 weeks) ..	147083	9391	1 3 $\frac{1}{2}$	....	....	1420	0 2 $\frac{1}{4}$	69267
" 1878.....	124918	8879	1 5 $\frac{1}{2}$	....	....	4144	0 7 $\frac{1}{8}$	48511
" 1879.....	134746	8518	1 3 $\frac{1}{2}$	635	0 1 $\frac{1}{2}$	....	....	44439
Dec., 1879 (50 weeks) ..	126824	7817	1 2 $\frac{3}{4}$	1674	0 3 $\frac{1}{8}$	....	....	43225
" 1880.....	139421	8511	1 2 $\frac{3}{4}$	2514	0 4	....	....	44105
" 1881.....	132914	8168	1 2 $\frac{3}{4}$	1932	0 3 $\frac{1}{2}$	....	....	42203
" 1882.....	143019	8937	1 1 $\frac{1}{2}$	3504	0 5 $\frac{1}{4}$	....	....	40854
" 1883.....	156997	8976	1 1 $\frac{1}{2}$	4171	0 6 $\frac{3}{8}$	....	....	41365
" 1884 (53 weeks) ..	186137	9587	1 0	5693	0 7 $\frac{1}{2}$	....	....	42435
" 1885.....	194443	10315	1 0	5724	0 7	....	....	50190
" 1886.....	217812	11143	1 0 $\frac{1}{2}$	5660	0 6 $\frac{1}{2}$	....	....	60405
	1915165	111126	1 1 $\frac{7}{8}$	33472	....	5564	....	....
Less Depreciation allowed, see Disposal of Profit Account, October, 1877....		£4757		10321	....			
" Loss .....		5564						
Leaves Net Profit .....				23151	0 2 $\frac{1}{5}$			

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MANCHESTER BOOT AND SHOE SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

### YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Stocks.
		Amount	Rate.	Amount	Rate.	
	£	£		£	£	£
January, 1874 (1 quarter) .....	5506	204	8 $\frac{3}{4}$	1		4715
" 1875.....	37257	1129	7 $\frac{1}{2}$	748	4 $\frac{1}{2}$	5197
" 1876.....	53885	1326	5 $\frac{1}{2}$	775	3 $\frac{1}{2}$	7711
" 1877 (53 weeks).....	57307	1811	7 $\frac{1}{2}$	586	2 $\frac{3}{4}$	6082
" 1878.....	58304	1975	8 $\frac{1}{2}$	786	3 $\frac{1}{2}$	7935
" 1879.....	59327	2192	8 $\frac{1}{2}$	767	3	10242
December, 1879 (50 weeks).....	55270	2135	9 $\frac{1}{2}$	752	3 $\frac{1}{2}$	10964
" 1880.....	62139	2387	9 $\frac{1}{2}$	755	2 $\frac{1}{2}$	11484
" 1881.....	71382	2492	8 $\frac{1}{2}$	842	2 $\frac{3}{4}$	11377
" 1882.....	76101	2583	8 $\frac{1}{2}$	1246	3 $\frac{1}{2}$	12564
" 1883.....	86056	2882	8	1261	3 $\frac{1}{2}$	12938
" 1884 (53 weeks).....	99694	3150	7 $\frac{1}{2}$	1586	3 $\frac{1}{2}$	16576
" 1885.....	106755	3596	8	1395	3 $\frac{1}{2}$	16074
" 1886.....	121432	3772	7 $\frac{3}{8}$	2767	5 $\frac{3}{8}$	16578
	950415	31634	7 $\frac{7}{8}$	14267	8 $\frac{1}{2}$	..

## MANCHESTER FURNISHING SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

### YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Loss.		Stocks.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£	s. d.	£
Jan., 1877 (27 weeks) .....	5944	405	1 4 $\frac{3}{4}$	..	..	52	0 2	2571
" 1878.....	15464	984	1 3 $\frac{1}{2}$	65	0 1	..	..	2286
" 1879.....	17374	1185	1 4 $\frac{1}{2}$	140	0 17 $\frac{1}{2}$	..	..	2421
Dec., 1879 (50 weeks).....	18361	1108	1 2 $\frac{3}{8}$	60	0 0 $\frac{3}{4}$	..	..	3524
" 1880.....	24243	1317	1 1	404	0 4	..	..	4307
" 1881.....	24844	1293	1 0 $\frac{1}{2}$	171	0 15 $\frac{1}{2}$	..	..	3971
" 1882.....	29021	1515	1 0 $\frac{1}{2}$	219	0 14 $\frac{1}{2}$	..	..	3630
" 1883.....	34804	1878	1 0 $\frac{5}{8}$	423	0 27 $\frac{1}{2}$	..	..	4274
" 1884 (53 weeks).....	44311	2253	1 0	673	0 33 $\frac{1}{2}$	..	..	5433
" 1885.....	51238	2415	0 11 $\frac{1}{2}$	893	0 41 $\frac{1}{2}$	..	..	5817
" 1886.....	62340	2657	0 10 $\frac{5}{8}$	1129	0 4 $\frac{1}{2}$	..	..	6581
	327944	17010	1 0 $\frac{3}{8}$	4177	..	52	..	..
	Less Loss.....			52	..			
	Leaves Net Profit .....			4125	0 3			



# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## NEWCASTLE BRANCH GROCERY AND PROVISION SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

### YEARLY ACCOUNTS.

YEAR ENDING		Sales.	EXPENSES.		PROFIT.		Stocks.
			Amount	Rate.	Amount	Rate.	
		£	£	s. d.	£	s. d.	£
January,	1877 (53 weeks).....	529244	7727	0 3½	4531	0 2	34591
"	1878 .....	541783	8213	0 3½	4189	0 1½	28996
"	1879 .....	457597	7402	0 3½	3168	0 1½	22789
December,	1879 (50 weeks).....	465108	6823	0 3½	7284	0 3½	49145
"	1880 .....	588664	7868	0 3½	4636	0 1½	44398
"	1881 .....	709337	8921	0 3	9296	0 3½	54648
"	1882 .....	795007	10098	0 3	8741	0 2½	65330
"	1883 .....	871597	10785	0 2½	10476	0 2½	55152
"	1884 (53 weeks).....	930803	11395	0 2½	12451	0 3½	65158
"	1885 .....	936542	12075	0 3	14422	0 3½	53546
"	1886 .....	949878	12321	0 3	18794	0 4½	71265
		7769560	103628	0 3½	97888	0 3½	..

## NEWCASTLE BRANCH DRAPERY SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

### YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Stocks
		Amount.	Rate.	Amount.	Rate.	
	£	£	s. d.	£	s. d.	£
January, 1877 (53 weeks) .....	39896	1728	0 10½	796	0 4¾	11525
„ 1878.....	49559	2211	0 10½	999	0 4½	11635
„ 1879.....	44161	2159	0 11½	612	0 3½	10463
December, 1879 (50 weeks).....	44674	2153	0 11½	871	0 4½	11590
„ 1880.....	55979	2494	0 10½	2206	0 9½	16171
„ 1881.....	69081	2656	0 9½	2339	0 8½	16075
„ 1882.....	84457	2975	0 8½	3656	0 10½	15754
„ 1883.....	99354	3387	0 8½	4499	0 10½	16594
„ 1884 (53 weeks) .....	118345	3983	0 8	4503	0 9½	18906
„ 1885.....	142701	4598	0 7½	6906	0 11½	24084
„ 1886.....	152493	5342	0 8½	7562	0 11½	28645
	900640	33686	0 8½	34949	0 9½	..

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

NEWCASTLE BRANCH BOOT AND SHOE AND FURNISHING SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

## YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Stocks.
		Amount	Rate.	Amount	Rate.	
	£	£	s. d.	£	s. d.	£
January, 1877 (53 weeks).....	25379	649	0 6 $\frac{1}{2}$	406	0 3 $\frac{3}{4}$	1505
" 1878.....	28425	760	0 6 $\frac{1}{2}$	690	0 5 $\frac{1}{4}$	2242
" 1879.....	28375	880	0 7 $\frac{1}{2}$	310	0 2 $\frac{3}{8}$	3179
December, 1879 (50 weeks).....	27708	935	0 8	357	0 3	4681
" 1880.....	34968	1276	0 8 $\frac{1}{2}$	649	0 4 $\frac{3}{8}$	5971
" 1881.....	42991	1307	0 7 $\frac{1}{2}$	938	0 5 $\frac{1}{4}$	4645
" 1882.....	54487	1527	0 6 $\frac{1}{2}$	1336	0 5 $\frac{1}{4}$	6561
" 1883.....	65501	1955	0 7 $\frac{1}{2}$	1890	0 6 $\frac{1}{2}$	5817
" 1884 (53 weeks).....	75054	2408	0 7 $\frac{1}{2}$	1917	0 6 $\frac{1}{2}$	8266
" 1885.....	89117	2783	0 7 $\frac{1}{2}$	2195	0 5 $\frac{1}{8}$	11319
" 1886.....	97148	3646	0 9	1619	0 4	13442
	569153	18126	0 7 $\frac{3}{8}$	12307	0 5 $\frac{1}{8}$	..

LONDON BRANCH GROCERY SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

## YEARLY ACCOUNTS.

YEAR ENDING	Sales.	EXPENSES.		PROFIT.		Stocks.
		Amount.	Rate.	Amount.	Rate.	
	£	£	s. d.	£	s. d.	£
January, 1875 (3 qrs.).....	72385	1542	0 5 $\frac{1}{2}$	567	0 1 $\frac{1}{2}$	7315
" 1876.....	130752	2865	0 4 $\frac{1}{2}$	1584	0 2 $\frac{1}{2}$	7219
" 1877 (53 wks.).....	184879	3026	0 5 $\frac{1}{2}$	4182	0 5 $\frac{1}{2}$	12668
" 1878.....	210415	3283	0 3 $\frac{1}{2}$	2320	0 2 $\frac{1}{2}$	10511
" 1879.....	216314	3381	0 3 $\frac{1}{2}$	2388	0 2 $\frac{1}{2}$	8489
December, 1879 (50 wks.).....	232660	3570	0 3 $\frac{1}{2}$	5239	0 5 $\frac{1}{8}$	13594
" 1880.....	274965	4066	0 3 $\frac{1}{2}$	3559	0 3 $\frac{1}{2}$	20789
" 1881.....	289748	5310	0 4 $\frac{1}{2}$	2149	0 1 $\frac{1}{2}$	7394
" 1882.....	296767	5001	0 4	3776	0 3	10636
" 1883.....	337753	5441	0 3 $\frac{1}{8}$	4630	0 3 $\frac{1}{4}$	13282
" 1884 (53 wks.).....	375963	6233	0 4	5062	0 5 $\frac{1}{4}$	18869
" 1885.....	445876	7485	0 4	9101	0 4 $\frac{1}{2}$	24256
" 1886.....	527904	8463	0 3 $\frac{1}{2}$	9719	0 4 $\frac{3}{8}$	24739
	3596381	59166	0 3 $\frac{1}{8}$	54276	0 3 $\frac{1}{2}$	....

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

LONDON BRANCH DRAPERY SALES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

## YEARLY ACCOUNTS.

YEAR ENDING	SALES.			EXPENSES.		PROFIT.		Stocks.
	Drapery and Furnishing	Boots and Shoes.	Total.	Amount	Rate.	Amount.	Rate.	
	£	£	£	£	s. d.	£	s. d.	£
December, 1880 (2 qrs.)	1657	6500	8157	312	0 9½	36	0 1	3805
" 1881 .....	12558	13448	26006	1268	0 11½	149	0 1½	7054
" 1882 .....	16936	15629	32565	1636	1 0	312	0 2½	9524
" 1883 .....	21754	17983	39737	2412	1 2½	286	0 1½	10011
" 1884 (53 wks)	29003	19826	48829	2807	1 1½	532	0 2½	9977
" 1885 .....	40448	22324	62772	3554	1 1½	684	0 2½	11502
" 1886 .....	53749	26090	79839	4529	1 1½	776	0 2½	13713
	176105	121800	297905	16518	1 1½	2775	0 2½	....

# CRUMPSALL BISCUIT WORKS SUPPLIES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

## YEARLY ACCOUNTS.

YEAR ENDING	Net Sup-plies.	Production.	EXPENSES.				RATE ON PRODUCTION.		NET PROFIT.		Stocks.
			Sun-dry.	Depre-ciation.	In-terest	Total.	Per cent.	Per £.	Amount	Rate per £.	
	£	£	£	£	£	£	s. d.	s. d.	£	s. d.	£
Jan., 1874*..	2987	2878	604	60	87	751	26 1 10	5 2½	15	0 1½	1678
" 1875..	13189	13124	2190	323	495	3008	22 18 5	4 7	228	0 4½	2029
" 1876..	13664	13392	2515	324	371	3210	23 19 5	4 9½	712	1 0	1538
" 1877†.	15866	16065	3282	398	441	4121	25 13 0	5 1½	630	0 9½	2867
" 1878..	18018	18126	2672	444	500	3616	19 18 11	3 11½	514	0 6½	2961
" 1879..	17553	17289	2798	481	481	3760	21 15 0	4 4½	1518	1 9	2506
Dec., 1879†.	16623	16454	2852	532	447	3881	23 5 8	4 7½	1004	1 2½	2335
" 1880..	19153	19069	2985	572	429	3986	20 18 1	4 2½	995	1 0½	1793
" 1881..	20122	20274	3056	576	429	4061	20 0 7	4 0	887	0 10½	2105
" 1882..	21632	21578	3095	578	401	4074	18 17 7	3 9½	1498	1 4½	1703
" 1883..	21897	21712	3228	589	408	4225	19 9 2	3 10½	2081	1 11	1896
" 1884†.	21549	21565	3841	665	430	4936	22 17 9	4 6½	2030	1 10½	2129
" 1885..	21479	21830	4794	786	454	6034	27 12 9	5 6½	1491	1 4½	3534
" 1886..	23534	22885	5815	897	529	7241	31 12 9½	6 3½	Loss 61	0 0½	4207
	247266	246241	48727	7225	5902	56854	23 1 9½	4 7½	13542	1 1½	..

\* One quarter.

† Fifty-three weeks.

‡ Fifty weeks.



# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

LEICESTER BOOT AND SHOE WORKS SUPPLIES, EXPENSES, PROFIT, AND STOCKS.

*From the time of commencing to keep a separate Account.*

## YEARLY ACCOUNTS.

YEAR ENDING	Net Sup- plies.	Production.	EXPENSES.				RATE ON PRODUCTION.				NET PROFIT.		NET LOSS.		Stocks.
			Sun- dry.	Depre- ciation.	Interest	Total.	Per cent.	Per £.			Amount	Rate.	Amount	Rate.	
Jan., 1874*..	£ 3422	£ 5190	£ 1281	£ 6	£ 29	£ 1316	25 6 8	5 0 3			£ ..	s. d. ..	£ 8	s. d. 0 0 ½	£ 2579
" 1875..	29456	38684	10047	36	342	10425	26 18 11	5 4 2			584	0 3 ½	..	..	6466
" 1876..	53687	53702	16936	124	543	17603	32 15 6	6 6 2			912	0 4 ½	..	..	9186
" 1877†..	62205	60104	20631	246	780	21657	36 0 6	7 2 ½			886	0 3 ½	..	..	14131
" 1878..	71140	67603	23357	416	1023	24796	36 18 6	7 4 ½			211	0 0 ½	..	..	12922
" 1879..	73381	72939	25902	424	998	27324	37 9 9	7 6 ½			1575	0 5 ½	..	..	14515
Dec., 1879†..	77476	77746	28016	417	945	29378	37 15 8	7 6 ½			1645	0 5 ½	..	..	24733
" 1880..	84655	84429	29866	444	1241	31551	37 7 4	7 5 ½			..	..	309	0 0 ½	15772
" 1881..	87607	89150	32682	448	1087	34217	38 8 8	7 8 ½			452	0 1 ½	..	..	15594
" 1882..	99098	99517	36388	495	1113	37996	38 5 7	7 7 ½			1649	0 3 ½	..	..	14192
" 1883..	91986	90214	33868	511	1040	35419	39 5 2	7 10 ½			190	0 0 ½	..	..	10384
" 1884†..	107166	106333	39237	838	1267	41342	38 17 7	7 9 ½			3261	0 7 ½	..	..	17800
" 1885..	109464	107806	39846	1077	1315	42238	39 3 7	7 10 ½			3078	0 6 ½	..	..	15752
" 1886..	122463	122703	44731	1104	1244	47079	38 7 4 ½	7 8 ½			6059	0 11 ½	..	..	17736
											20502	..	317	..	..
											317	..	..	..	..
											20185	0 4 ½	..	..	..

\* One quarter.

† Fifty-three weeks.

‡ Fifty weeks.

DURHAM SOAP WORKS SUPPLIES, EXPENSES, PROFIT, AND STOCKS.

*From its Commencement.*

## YEARLY ACCOUNTS.

YEAR ENDING	Net Sup- plies.	Production.	EXPENSES.				RATE ON PRODUCTION.				NET PROFIT.		NET LOSS.		Stocks.
			Sun- dry.	Depre- ciation.	Interest	Total.	Per cent.	Per £.			Amount	Rate.	Amount	Rate.	
Jan., 1875* ....	£ 2099	£ 2976	£ 130	£ 75	£ 85	£ 290	9 14 10	1 11 ½			£ 19	s. d. 0 1 ½	..	..	£ 1809
" 1876 ....	9264	9309	512	155	213	880	9 9 0	1 10 ½			236	0 6 ½	..	..	1303
" 1877† ....	9549	9725	488	177	271	936	9 12 6	1 11 ½			191	0 4 ½	..	..	3871
" 1878 ....	11098	11913	684	336	448	1468	12 6 5	2 5 ½			..	..	307	0 6 ½	3721
" 1879 ....	11735	11169	883	345	430	1658	14 16 10	2 11 ½			..	..	670	1 2 ½	3130
Dec., 1879† ....	8903	9337	715	277	349	1341	14 5 8	2 10 ½			..	..	115	0 2 ½	3769
" 1880 ....	11730	11404	781	289	323	1393	12 4 3	2 5 ½			138	0 2 ½	..	..	3571
" 1881 ....	11871	12265	842	292	376	1510	12 6 2	2 5 ½			132	0 2 ½	..	..	3707
" 1882 ....	12801	12504	795	292	350	1437	11 9 10	2 3 ½			..	..	99	0 17 ½	2628
" 1883 ....	14751	15941	910	299	359	1568	9 16 8	1 11 ½			62	0 0 ½	..	..	5185
" 1884† ....	15219	14721	849	327	343	1519	10 6 4	2 0 ½			97	0 1 ½	..	..	3489
" 1885 ....	17911	17994	1117	320	300	1737	9 18 0	1 11 ½			907	1 0 ½	..	..	4361
" 1886 ....	15886	15733	1623	320	252	2195	13 18 1 ½	2 9 ½			741	0 11 ½	..	..	3999
											2523	..	1191	..	..
											1191	..	..	..	..
											1332	0 2	..	..	..

\* Two quarters.

† Fifty-three weeks.

‡ Fifty weeks.

# THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## HECKMONDWIKE BOOT AND SHOE WORKS SUPPLIES, EXPENSES, PROFIT, AND STOCKS.

*From its Commencement.*

### YEARLY ACCOUNTS.

YEAR ENDING	Net Sup- plies.	Production.	EXPENSES.				RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks.
			Sun- dry.	Depre- ciation.	Interest	Total.	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
	£	£	£	£	£	£	£ s. d.	s. d.	£	s. d.	£	s. d.	£
Dec. 1830*.	3060	3438	1057	16	30	1103	32 1 7	6 4 $\frac{1}{8}$	....	....	181	1 0 $\frac{1}{8}$	2473
„ 1881..	11151	11417	3592	57	157	3806	33 6 8	6 8	....	....	608	1 0 $\frac{1}{4}$	2238
„ 1882..	14602	15454	5041	66	183	5290	34 4 8	6 10 $\frac{1}{8}$	....	....	163	0 2 $\frac{1}{2}$	4016
„ 1883..	16661	16377	5435	68	222	5725	34 19 1 $\frac{7}{8}$	6 11 $\frac{7}{8}$	294	0 4 $\frac{1}{2}$	....	....	3950
„ 1884†	18215	18138	5924	94	220	6238	34 7 10	6 10 $\frac{1}{2}$	287	0 3 $\frac{1}{4}$	....	....	3506
„ 1885..	22666	23811	7832	176	256	8264	34 14 1	6 11 $\frac{1}{4}$	261	0 2 $\frac{3}{4}$	....	....	5314
„ 1886..	22231	23418	7867	267	405	8539	36 9 3 $\frac{1}{8}$	7 3 $\frac{1}{2}$	375	0 4	....	....	6869
	108586	112053	36748	744	1473	38965	34 15 5 $\frac{5}{8}$	6 11 $\frac{1}{8}$	1217	....	952	....	....
							Less Loss ....		952	....			
							Leaves Profit..		265	0 0 $\frac{1}{2}$			

\* Two quarters.

† Fifty-three weeks.



# THE CO-OPERATIVE WHOLESALE SOCIETY

## LIMITED.

### PRINCIPAL EVENTS IN CONNECTION THEREWITH SINCE ITS COMMENCEMENT.

YEAR.	DAY.	EVENTS.
1863	Aug. 11 .....	Co-operative Wholesale Society enrolled.
1864	Mar. 14 .....	Co-operative Wholesale Society commenced business.
1866	April 24 .....	Tipperary Branch opened.
1868	June 1 .....	Kilmallock Branch opened.
1869	Mar. 1 .....	Balloon Street Warehouse opened.
"	July 12 .....	Limerick Branch opened.
1871	Nov. 26 .....	Newcastle-on-Tyne Branch opened.
1872	July 1 .....	Manchester Boot and Shoe Department commenced.
"	Oct. 14 .....	Bank Department commenced.
1873	Jan. 13 .....	Crumpsall Works purchased.
"	April 14 .....	Armagh Branch opened.
"	June 2 .....	Manchester Drapery Department established.
"	July 14 .....	Waterford Branch opened.
"	Aug. 4 .....	Cheshire Branch opened.
"	" 4 .....	Leicester Works purchased.
"	" 16 .....	Insurance Fund established.
"	Sept. 15 .....	Leicester Works commenced.
1874	Feb. 2 .....	Tralee Branch opened.
"	Mar. 9 .....	London Branch established.
"	Oct. 5 .....	Durham Soap Works commenced.
1875	April 2 .....	Liverpool Purchasing Department commenced.
"	June 15 .....	Manchester Drapery Warehouse (Dantzic St.) opened.
1876	Feb. 14 .....	Newcastle Branch Buildings, Waterloo Street, opened.
"	" 21 .....	New York Branch established.
"	May 24 .....	S.S. "Plover" purchased.
"	July 16 .....	Manchester Furnishing Department commenced.
"	Aug. 5 .....	Leicester Works first Extensions opened.
1877	Jan. 15 .....	Cork Branch established.
"	Oct. 25 .....	Land in Liverpool purchased.
1879	Feb. 21 .....	S.S. "Pioneer," Launch of.
"	Mar. 24 .....	Rouen Branch opened.
"	" 29 .....	S.S. "Pioneer," Trial trip.
"	June 30 .....	Goole Forwarding Department opened.
1880	Jan. 30 .....	S.S. "Plover" sold.
"	Aug. 14 .....	Heckmondwike Boot and Shoe Works commenced.
"	Sept. 27 .....	London Drapery Department commenced in new
1881	June 6 .....	Copenhagen Branch opened. [premises, Hooper Sq.
"	July 27 .....	S.S. "Cambrian" purchased.
1882	Oct. 31 .....	Leeds Saleroom opened.
"	Nov. 1 .....	London Tea and Coffee Department commenced.
1883	July 21 .....	S.S. "Marianne Briggs" purchased.
1884	April 7 .....	Hamburg Branch commenced.
"	May 31 .....	Leicester Works second Extensions opened.
"	June 25 .....	Newcastle Branch—New Drapery Warehouse opened.
"	Sept. 13 .....	Commemoration of the Society's Twenty-first Anniver-
"	" 20 .....	sary at Newcastle-on-Tyne and London.
"	" 29 .....	Commemoration of the Society's Twenty-first Anniver-
"	Oct. 6 .....	Bristol Dépôt commenced. [sary at Manchester.
1885	Dec. 30 .....	Launch of the s.s. "Progress."
1886	April 22 .....	Fire—London Branch.
"	Aug. 25 .....	Nottingham Saleroom opened.
"	Oct. 12 .....	Longton Crockery Dépôt opened.
1887	Mar. 14 .....	Launch of s.s. "Federation."
"	June 1 .....	Batley Mill commenced.
"	July 21 .....	S.S. "Progress" damaged by fire at Hamburg.
"	Nov. 2 .....	Manchester—New Furnishing Warehouse opened.
"	" 2 .....	London Branch—New Warehouse opened.
"	" 2 .....	Manufacture of Cocoa and Chocolate commenced.



# THE CENTRAL CO-OPERATIVE BOARD.

OFFICES: CITY BUILDINGS, CORPORATION STREET,  
MANCHESTER.

The CENTRAL CO-OPERATIVE BOARD is the Executive of the *Co-operative Union*, an organisation which has been formed for—

The promotion of the practice of truthfulness, justice, and economy in production and exchange.

(1) By the abolition of all false dealing, either—

*a. Direct*, by representing any article produced or sold to be other than what it is known to the producer or vendor to be; or,

*b. Indirect*, by concealing from the purchaser any fact known to the vendor material to be known by the purchaser, to enable him to judge of the value of the article purchased.

(2) By conciliating the conflicting interests of the capitalist, the worker, and the purchaser, through an equitable division among them of the fund commonly known as *Profit*.

(3) By preventing the waste of labour now caused by unregulated competition.

Whoever seriously considers the enormous amount of evil caused to mankind at present by the non-observance of these principles in the transactions forming the staple of their daily lives, and the corresponding amount of good that would arise from their general adoption, must give a hearty support to a Union formed to promote their practice.

The Executive of the Union is—

*a.* A Board of Legal and General Advice in all matters relating to the business and interest of societies as co-operative associations.

*b.* A Statistical Bureau, collecting and collating for the free use of the societies every kind of information likely to be of service to them.

*c.* A Propagandist Agency, organising and directing efforts for the dissemination of the principles of co-operation throughout Great Britain and Ireland, and afterwards to the world at large.

The Union consists of Industrial and Provident Societies, Friendly or Building Societies, Trade Unions or Associations, Joint-stock Companies or Industrial Partnerships.

No society is admitted into the Union unless its management is of a representative character, nor unless it agree—

(1) To accept the statement of principles given above as the rules by which it shall be guided in all its own business transactions.

(2) To contribute to the fund called the Congress Fund the annual payment following:—

*a.* If the number of members of any such society, or of the employés of any such industrial partnership, is less than 500, then the sum of 2d. for each member:

*b.* If the number of such members (or employés) exceeds 500, then, at least, the sum of 1,000d.

In estimating the number of members of a society comprising other societies, each such society is considered to be one member.

The financial year commences on the 1st April in each year, and the subscription is considered due, 1d. in the first and 1d. in the third quarter, but may be wholly paid in the first quarter.

Secretaries forwarding Cheques on account of the Board are requested to make them payable to the Central Co-operative Board; Money Orders to J. C. GRAY, Cashier.

# SUMMARY OF THE LAW RELATING TO SOCIETIES

UNDER THE

INDUSTRIAL AND PROVIDENT SOCIETIES ACT, 1876,

THE CUSTOMS AND INLAND REVENUE ACT, 1880, AND THE PROVIDENT NOMINATIONS  
AND SMALL INTESACIES ACT, 1883.

## *I.—The Formation of Societies—*

1. Application must be made to the Registrar of Friendly Societies, in London, Edinburgh, or Dublin, according to the case, on a form supplied by the office, signed by seven persons and the secretary, accompanied by two copies of the rules, signed by the same persons.

2. These rules must provide for twenty matters stated on the form of application.

3. No fees charged on the registration of a society.

N.B.—Model rules on these twenty matters can be obtained from the Registrar's office; and the Central Board, 14, City Buildings, Corporation Street, Manchester, publishes, at the cost of twopence a copy, general rules, approved of by the Chief Registrar, providing also for many other matters on which rules are useful; and capable of being adopted, either with or without alterations, by a few special rules, with a great saving in the cost of printing.

The General Secretary will prepare such special rules, without charge, on receiving a statement of the rules desired.

## *II. Rights of a Registered Society—*

1. It becomes a body corporate, which can by its corporate name sue and be sued, and hold and deal with property of any kind, including shares in other societies or companies, and land to any amount.

2. Its rules are binding upon its members, though they may have signed no assent to them; but may be altered by amendments duly made as the rules provide, and registered, for which a fee of 10s. is charged. The application for registration must be made on a form supplied by the Registrar's office.

3. It can sue its own members, and can make contracts, either under its seal or by a writing signed by any person authorised to sign, or by word of mouth of any person authorised to speak for it, which will be binding wherever a contract similarly made by an individual would bind him.

4. It may make all or any of its shares either transferable or withdrawable, and may carry on any trade, including the buying and selling of land, and banking under certain conditions, and may apply the profits of the business to any lawful purpose; and, if authorised by its rules, may receive money on loan, either from its members or others, to any amount so authorised.

5. If it has any withdrawable share capital it may not carry on banking, but may take deposits, within any limits fixed by its rules, in sums not exceeding 5s. in any one payment, or £20 for any one depositor, payable at not less than two clear days' notice.

6. It may make loans to its members on real or personal security; and may invest on the security of other societies or companies, or in any except those where liability is unlimited.

7. If the number of its shares is not limited either by its rules or its practice, it is not chargeable with income tax on the profits of its business.

8. It can, in the way provided by the Act, amalgamate with or take over the business of any other society, or convert itself into a company.



9. It can determine the way in which disputes between the society and its officers or members shall be settled.

10. It can dissolve itself, either by an instrument of dissolution signed by three-fourths of its members, or by a resolution passed by a three-fourths vote at a special general meeting, of which there are two forms—(A) purely voluntary, when the resolution requires confirmation at a second meeting; (B) on account of debts, when one meeting is sufficient. In such a winding up hostile proceedings to seize the property can be stayed.

### *III.—Rights of the Members (see also IV., 4, 5, 6)—*

1. They cannot be sued individually for the debts of the society, nor compelled to pay more towards them than the sum remaining unpaid on any shares which they have either expressly agreed to take or treated as their property, or which the rules authorise to be so treated.

2. If they transfer or withdraw their shares, they cannot be made liable for any debts contracted subsequently, nor for those subsisting at the time of the transfer or withdrawal, unless the other assets are insufficient to pay them.

3. Persons not under the age of 16 years may become members, and legally do any acts which they could do if of full age, except holding any office.

4. An individual or company may hold any number of shares allowed by the rules, not exceeding the nominal value of £200, and any amount so allowed as a loan. A society may hold any number of shares.

5. A member who holds at his death not more than £100 in the society as shares loans, or deposits, may, by a writing recorded by it, nominate, or vary or revoke the nomination of any persons to take this investment at his death; and if he dies intestate, without having made any subsisting nomination, the committee of management of the society are charged with the administration of the fund; subject in either case to a notice to be given to the Commissioners of Inland Revenue whenever the sum so dealt with exceeds £80.

6. The members may obtain an inquiry into the position of the society by application to the Registrar.

### *IV.—Duties of a Registered Society—*

1. It must have a registered office, and keep its name painted or engraved outside, and give due notice of any change to the Registrar.

2. It must have a seal on which its name is engraved.

3. It must have its accounts audited at least once a year, and keep a copy of its last balance sheet and the auditors' report constantly hung up in its registered office.

4. It must make to the Registrar, before the 1st of June in every year, a return of its business during the year ending the 31st December previous, and supply a copy of its last returns gratis to every member and person interested in its funds on application.

5. It must allow any member or person interested in its funds to inspect its books, other than the loan or deposit account of any other member.

6. It must supply a copy of its rules to every person on demand, at a price not exceeding one shilling.

7. If it carries on banking, it must make out in February and August in every year, and keep hung up in its registered office, a return, in a form prescribed by the Act; and it has also to make a return every February to the Stamp-office under the Banking Act.

The non-observance by a society of these duties exposes it and its officers to penalties varying from £1 to £50, which are in some cases cumulative for every week during which the neglect lasts.



THE  
 “CO-OPERATIVE NEWS”  
 AND  
 Journal of Associated Industry.

---

THE ONLY ORGAN OF CO-OPERATIVE INFORMATION  
 IN THE UNITED KINGDOM.

---

THE *News* is the property of a Federation of Co-operative Societies located in all parts of Great Britain. It is an exponent of opinion, thoroughly impartial and comprehensive, upon all subjects connected with Association, particularly in its application to the Distribution and Production of Wealth. It is a free platform for the discussion of topics bearing upon the social well-being of the people, and affords an opportunity for the expression of every view of Co-operation which commends itself as thoughtful and sincere.

It aims at becoming *the paper* for the working man, by embracing every subject interesting to him in his daily life.

The importance of maintaining a vehicle for the conveyance of co-operative intelligence cannot be over-rated. Each society is invited to become a shareholder, and every individual co-operator is solicited to subscribe.

The *News* may be had by application to any Bookseller, through the Local Stores, or from the Offices of the Society, 88 and 90, Corporation Street, Manchester, and 19, Russell Street, Covent Garden, London, W.C.

**PRICE ONE PENNY WEEKLY.**

*Sold at many of the Stores at One Halfpenny.*

THE  
CO-OPERATIVE INSURANCE COMPANY  
LIMITED.

ESTABLISHED 1867.

HEAD OFFICES:

CITY BUILDINGS, CORPORATION STREET, MANCHESTER.

PRINCIPAL AGENCIES:

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

119, PAISLEY ROAD, GLASGOW;

AND EACH BRANCH OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

Directors:

CHAIRMAN—MR. WILLIAM BARNETT, Macclesfield.

MR. WM. BAMFORTH, Manchester.

MR. TITUS HALL, Bradford.

MR. W. A. HILTON, Bolton.

MR. T. WOOD, Manchester.

MR. ROBERT HOLT, Rochdale.

MR. A. MILLER, Tillicoultry, N.B.

MR. E. V. NEALE, Bisham Abbey.

Auditors:

MR. A. HACKNEY, Bolton, and MR. J. E. LORD, Rochdale.

Manager:

MR. JAMES ODGERS, Manchester.

Bankers:

THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

ALMOST immediately after the establishment of the Co-operative Wholesale Society, the representatives of co-operative societies, at their periodical conferences, began to consider the advisability of having an insurance institution of their own.

Insurance was not, at that time, included among the objects for which societies might be registered under the Industrial and Provident Societies Act.

On August 29th, 1867, however, the Co-operative Insurance Company Limited was incorporated under the Companies Act, with its Registered Office at the Equitable Pioneers' Society's Stores, in Toad Lane, Rochdale; with the following objects, viz:—

1. To Insure against Damage by Fire any Property, whether belonging to any member of the Company or not.
2. To guarantee the honesty of persons employed by Co-operative Societies.
3. To Insure the Lives of Members of Co-operative Societies.
4. To do all such other things as are incidental or conducive to the attainment of the above objects.

The first Fire Policy was issued on February 21st, 1868, and the first Fidelity Guarantee Policy was issued on June 25th, 1869. Towards the end of 1871 the Company's Office was removed to Manchester, and in 1872 it began to appoint agents.

At the eighteenth Annual Meeting, held on February 27th, 1886, it was resolved to carry into effect the third object for which the Company was registered, viz., "To Insure the Lives of Members of Co-operative Societies."

Tables of Premiums were promptly prepared,—the prospectus of the Life Department was distributed at the Plymouth Congress in Whit-week, and the first Life Policy was issued on August 14th, 1886.

The following statement shows the Progress of the Company to the end of 1886:—

YEAR.	No. of Society Shareholders.	SHARE CAPITAL. Shares—£1 each.		Fire Insurances.		Fidelity Guarantee.		Life Insurance.		Funds in excess of Paid-up Capital.
		Sub-scribed.	Paid up.	Premiums after Deducting Re-Insurances.	Losses.	Pre-miums.	Losses.	Pre-miums.	Claims.	
		£	£	£	£	£	£	£	£	£
1868	Seven months only—	included with next year.								
1869	41	1,715	503	208	6	67	Nil.	Nil.	Nil.	187
1870	41	1,715	524	157	1	123	..	..	..	378
1871	42	4,216	1,008	173	Nil.	162	..	..	..	597
1872	46	6,468	1,514	256	62	253	..	..	..	961
1873	51	9,494	2,204	369	28	392	3	..	..	1,488
1874	64	10,706	2,868	571	29	449	200	..	..	1,793
1875	71	11,314	3,855	1,074	1,861	559	Nil.	..	..	1,508
1876	89	11,877	4,171	1,725	39	457	..	..	..	3,191
1877	96	12,365	4,590	3,923	1,613	525	270	..	..	4,887
1878	109	13,208	5,404	6,342	6,933	399	Nil.	..	..	3,139
1879	128	15,996	6,475	5,220	3,888	568	23	..	..	3,662
1880	144	17,698	10,289	3,393	3,403	543	50	..	..	3,093
1881	169	19,377	10,518	3,061	2,738	541	402	..	..	2,841
1882	180	20,170	10,587	2,829	1,741	536	692	..	..	2,730
1883	194	22,985	11,110	3,111	2,275	551	277	..	..	2,998
1884	204	23,760	11,243	3,451	461	620	286	..	..	5,065
1885	236	26,475	11,728	4,424	2,463	777	1132	..	..	5,356
1886	260	29,020	12,227	4,711	1,117	699	300	118	..	7,353

#### LIFE DEPARTMENT.

Although the Company was established three years before the Life Assurance Companies Act, 1870, was passed, the following requirements by that Act apply to the Company, and increase the



### SECURITY OF POLICY-HOLDERS.

"A separate account shall be kept of all receipts in respect of the life assurance contracts of the Company, and the said receipts shall be carried to and form a separate fund, to be called the Life Assurance Fund of the Company, and such fund shall be as absolutely the security of the life policy-holders as though it belonged to a company carrying on no other business than life assurance, and shall not be liable for any contracts of the Company for which it would not have been liable had the business of the Company been only that of Life Assurance."

The Company's insurances on lives take effect for the full amount from the moment when the first premium has been paid; and all reasonable facilities are given to the insured to prevent the lapsing of policies through temporary inability to pay the premiums.

### SPECIMEN RATES.

#### PREMIUMS FOR THE INSURANCE OF £100 AT DEATH.

Age next Birthday.	One Premium.	Yearly.	Half-yearly.	Quarterly.	Age next Birthday.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
20	37 8 6	1 15 8	0 18 10	0 10 0	20
25	40 10 2	2 0 4	1 1 3	0 11 3	25
30	43 17 1	2 5 10	1 4 0	0 12 8	30
35	47 11 9	2 12 11	1 7 8	0 14 6	35
40	51 13 3	3 1 8	1 12 1	0 16 8	40
45	56 1 4	3 12 10	1 17 9	0 19 7	45
50	60 17 5	4 7 6	2 5 4	1 3 4	50

NOTE.—Persons who prefer to be free from liability to pay renewal premiums after attaining the age of 55, 60, or 65, can be insured under the corresponding Tables.

#### PREMIUMS FOR THE INSURANCE OF £100 AT AGE 60 OR AT DEATH, IF THAT EVENT SHOULD OCCUR EARLIER.

Age next Birthday.	One Premium.	Yearly.	Half-yearly.	Quarterly.	Age next Birthday.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
20	43 1 2	2 5 2	1 3 11	0 12 11	20
25	47 5 0	2 12 10	1 7 10	0 14 10	25
30	51 19 2	3 3 0	1 12 11	0 17 5	30
35	57 7 1	3 17 1	2 0 3	1 1 1	35
40	63 11 7	4 17 11	2 10 9	1 6 6	40
45	70 14 4	6 11 3	3 8 1	1 15 3	45
50	79 11 4	9 14 11	5 1 4	2 12 3	50

The rates of premium for insurances effected at intermediate ages, and for insurances payable on the attainment of age 50, 55, or 65, and at the death of the first of two lives insured jointly, will be supplied on application.

Policies insuring £25, £50, and £75 are issued for proportionate parts of the Premium for £100, subject to the limitation that no Life Policy is issued for a less premium than Five Shillings.

### ONE-PREMIUM POLICIES.

A fully paid up Policy, insuring an amount payable at death or at age 50, 55, 60, or 65, may be obtained on payment of One Premium at the time of the acceptance of the proposal.

This method of Insurance is particularly suitable for those members of co-operative societies who have already saved some money.

### MARRIED WOMEN'S PROPERTY ACT.

ASSURANCES IN VARIOUS FORMS MAY BE EFFECTED UNDER THIS ACT.

### IMMEDIATE PAYMENT OF CLAIMS.

Claims are payable *immediately after proof of death and title* have been lodged at the Office and passed by the Directors.

THE PROFITS OF THE LIFE DEPARTMENT ARE DIVISIBLE EXCLUSIVELY WITH THE LIFE POLICY-HOLDERS.

To make Insurance as cheap as possible, the costly work of house-to-house collection of Premiums as practised by Industrial Life Offices must be dispensed with. If the members of stores will invest their savings therein, and pay the Premiums quarterly, half-yearly, or yearly, instead of weekly or monthly, the expenses will only be about half, or less than half as much as are charged in the premiums of Industrial Life Offices.

### FIRE DEPARTMENT.

Insurances against Loss or Damage by Fire, IN GREAT BRITAIN, are effected on Dwelling-houses, Schools, Public Buildings, Churches, Chapels, Co-operative Stores, Shops, Warehouses, Farming Property, Workshops, Mills; and on Goods in Transit on Roads and Railways; Merchandise in Docks, at Wharves, &c.; Vessels in Harbours and in Docks: Vessels in Navigable Rivers and Canals, and their Freight.

Most of the Co-operative Stores in England and many in Scotland and Wales are Insured by the Company. All Societies are invited to Transfer Insurances from other companies to the "Co-operative." The Members of Societies are also invited to propose their Property for Insurance.

Most persons in business insure their STOCK-IN-TRADE, but a very large proportion of the PROPERTY IN PRIVATE DWELLINGS is UNINSURED.

Probably many Householders are not aware that the cost of insurance does not ordinarily amount to more than ONE THOUSANDTH PART of the value of the Property Insured. In other words, they would be ONE THOUSAND YEARS in paying to the Company what the Company engages to pay them at once, if their Property be destroyed or damaged by Fire.

When the accidents which frequently happen to the most cautious are considered in connection with the carelessness which is generally to be found in some members of a family, and when to this is added the risk arising from the like cause in Property on each side of us, it appears almost rashness to neglect a Security, the cost of which is so trivial.

The subjoined Table is given as illustrating the small payments that are now required for Insurance on the BUILDINGS of BRICK-BUILT PRIVATE HOUSES, AND ON FURNITURE THEREIN, including China, Glass, Pottery, Pictures, Jewellery, Books, Linen, Clothing, &c., &c. :—

SUM ASSURED. ON HOUSES. ON FURNITURE.				SUM ASSURED. ON HOUSES. ON FURNITURE.			
£	s.	d.	s.	d.	£	s.	d.
100	..	2 0	..	2 0	400	..	6 0
150	..	2 3	..	3 0	500	..	7 6
200	..	3 0	..	4 0	1,000	..	15 0
300	..	4 6	..	6 0			£1

*Losses caused by Explosions of Coal-Gas within Private Dwellings Insured by the Company, and by Lightning, will be made good.*

### FIDELITY GUARANTEE DEPARTMENT.

Policies insuring Co-operative Societies against Loss by Acts of Embezzlement or Theft committed by persons employed by them in situations of trust, are issued at rates fixed in accordance with the conditions of risk.

The Company's Policies are accepted by the Local Government Board.

### MEMBERSHIP AND AGENCY.

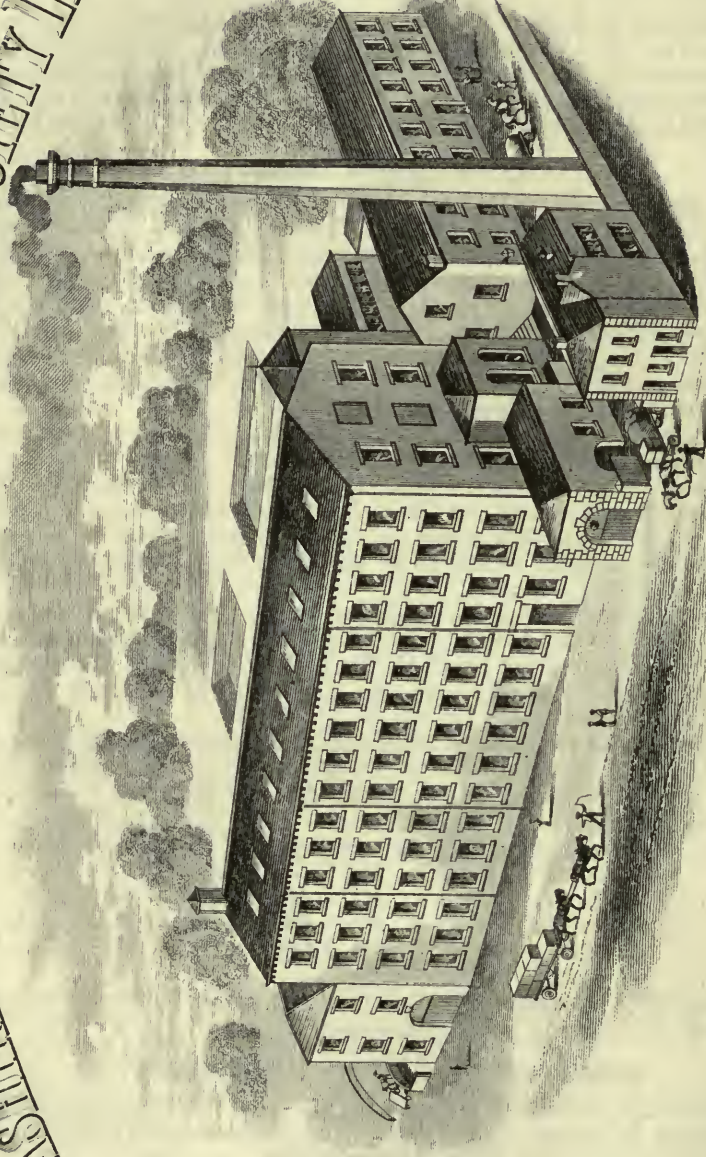
Every Co-operative Society which is not yet a member of the Company is invited to join it as Shareholder, Policy-holder, and Agent. For the more effectual development of the business, especially in the Life Department, a suitable individual agent is also wanted in connection with each society whose members are easily reached, and more than one where the members are distributed over a wide area.



THE LANCASHIRE & YORKSHIRE PRODUCTIVE SOCIETY LIMITED.

Anti-Rheumatic  
Flannels.

Domestic  
Flannels.



MANUFACTURERS,

Sare Mill Mills, LITTLEBOROUGH, near Manchester.

THE CELEBRATED ECONOMIC FLANNELS.



*We beg most respectfully to ask your kind and generous support of the above Society.*

The various descriptions of FLANNELS now made are admitted by those who have fully tried them to be unsurpassed in MAKE, WEIGHT, QUALITY, and PRICE.

It is earnestly requested that all Co-operative Societies press the sale of these Flannels amongst their members.

Economy is the order of the day, and we are fully justified in describing the Flannels made at the above mills as

## THE CELEBRATED ECONOMIC FLANNELS.

Whenever you are buying be sure and ask for them.

They can be had at any of the following Co-operative Establishments:

1, BALLOON STREET, MANCHESTER.

WATERLOO STREET, NEWCASTLE-ON-TYNE.

HOOPER SQUARE, LEMAN STREET, WHITECHAPEL, LONDON.

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY, PAISLEY ROAD, GLASGOW.

AND AT

THE MILLS, HARE HILL ROAD, LITTLEBOROUGH.

# THE LANCASHIRE AND YORKSHIRE PRODUCTIVE SOCIETY LIMITED.

## STATEMENT SHOWING CONDITION AND PROGRESS OF THE SOCIETY SINCE ITS COMMENCEMENT.

DATE.	Share Redemp- tion Fund.	Share Capital.	LOAN CAPITAL.				Profits.	Losses.	SALES.		
			Co-operative Societies.	Friendly Societies.	Individuals.	Total.			Co-operative.	Merchants.	Total.
	£	£	£	£	£	£	£	£	£	£	£
Half-year ending July 11, 1874	..	6195	..	..	..	..	..	..	..	..	..
" " Jan. 9, 1875	..	6195	..	50	341	391	..	..	..	..	..
" " July 9, 1875	..	6495	2330	868	1234	4432	456	..	1581	16	1597
" " Jan. 8, 1876	..	6495	2388	920	1273	4581	..	1896	5919	167	6087
" " July 8, 1876	..	6495	2423	960	1372	4756	..	43	5585	659	6244
" " Jan. 6, 1877	..	6600	2972	1091	1461	5525	157	..	4938	2827	7165
" " July 7, 1877	..	6600	2944	1297	1825	6067	..	496	2677	3136	5814
" " Jan. 5, 1878	..	6600	2946	1382	1723	6051	..	544	3094	4457	7551
" " June 29, 1878	..	*2640	2818	1295	1368	5482	..	+1451	2690	3583	6273
4½ Months ending Nov. 16, 1878	..	2640	2856	1268	1269	5395	..	966	1329	3958	5287
IN LIQUIDATION.											
1½ Months ending Jan. 4, 1879	..	2640	2876	1277	1278	5432	20	..	473	939	1413
3 " " April 5, 1879	..	2640	2912	1293	1294	5499	25	..	1531	1271	2803
3 " " July 5, 1879	..	2640	2948	1309	1310	5568	38	..	1546	709	2256
3 " " Oct. 4, 1879	..	2640	2985	1325	1326	5637	55	..	1639	172	1812
3 " " Jan. 3, 1880	..	2640	3022	1341	1345	5708	92	..	3988	210	4198
3 " " April 3, 1880	..	2640	3060	1357	1382	5799	93	..	3276	115	3391
3 " " July 3, 1880	..	2640	5406	1373	1511	8290	95	..	3707	204	3911
3 " " Oct. 2, 1880	..	2640	5440	1411	1529	8389	84	..	3169	138	3307
3 " " Jan. 1, 1881	..	2640	5486	1429	1575	8490	21	..	4266	175	4441
3 " " April 2, 1881	..	2640	5528	1448	1611	8587	32	..	3806	143	3949
3 " " July 2, 1881	..	2640	5569	1465	1631	8665	19	..	2249	124	2373
3 " " Oct. 1, 1881	..	2640	5609	1484	1652	8745	8	..	3893	332	4225
3 " " Jan. 7, 1882	..	2640	5651	1502	1723	8876	12	..	3719	592	4311
3 " " April 8, 1882	..	2640	5692	1521	1765	8978	12	..	2417	133	2550
3 " " July 8, 1882	..	2640	6742	1561	1842	10145	9	..	3225	203	3428
3 " " Oct. 7, 1882	..	2640	6797	1580	1858	10235	10	..	5038	754	5792
3 " " Jan. 6, 1883	..	2640	6832	1600	1889	10321	12	..	3506	1121	4627
3 " " April 7, 1883	..	2640	6876	1620	1913	10409	5	..	3012	570	3582
3 " " July 7, 1883	..	2640	6921	1639	1861	10421	13	..	2895	1799	4694
3 " " Oct. 6, 1883	..	2640	6966	1662	1850	10478	50	..	4275	1506	5781
3 " " Jan. 5, 1884	..	2640	7011	1680	1876	10567	38	..	4546	786	5332
3 " " April 5, 1884	..	2640	7057	1712	1897	10666	35	..	4146	190	4336
3 " " July 5, 1884	..	2640	7103	1722	1963	10788	32	..	4352	319	4671
3 " " Oct. 4, 1884	..	2640	7150	1745	1986	10881	29	..	6253	356	6609
3 " " Jan. 3, 1885	..	2640	7198	1766	2011	10975	82	..	5800	317	6117
3 " " April 4, 1885	..	2640	7246	1789	2041	11076	26	..	4919	150	5069
3 " " July 4, 1885	..	2640	7296	1811	2066	11173	57	..	6350	287	6637
3 " " Oct. -, 1885	..	2640	8346	1834	2090	12270	48	..	6975	741	7716
3 " " Jan. 2, 1886	48	2640	8409	1877	2115	12401	73	..	4936	379	5315
3 " " April 3, 1886	121	2640	8460	1901	2241	12602	34	..	4680	164	4844
3 " " July 3, 1886	155	2640	8511	1924	2269	12704	20	..	4168	856	5024
3 " " Oct. 2, 1886	175	2640	8564	1948	2297	12809	51	..	8365	434	8799
3 " " Jan. 1, 1887	226	2640	8617	1971	2376	12964	74	..	5935	719	6654
3 " " April 2, 1887	300	2640	8672	1995	2330	12997	62	..	3800	462	4262
3 " " July 2, 1887	361	2640	8726	2020	2359	13105	31	..	4319	701	5020

\* Share Capital reduced from £1 to 8s. per share.

† Including bad debts of £553, and formation expenses of £269.

# THE CO-OPERATIVE WHOLESALE SOCIETY

## LIMITED.

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### MEETINGS AND OTHER COMING EVENTS IN CONNECTION WITH THE SOCIETY IN 1888.

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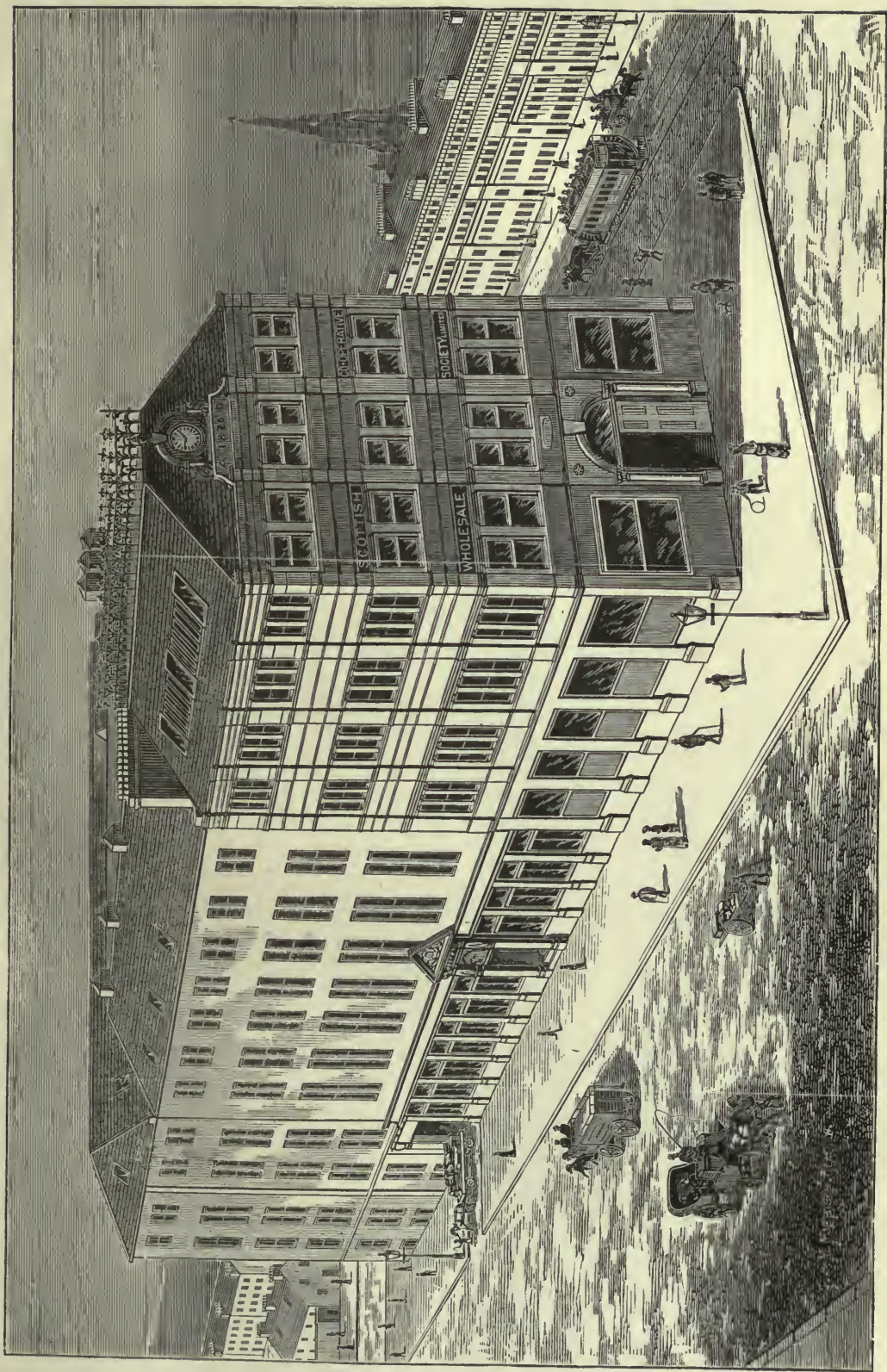
- Jan. 14—SATURDAY....Nomination Lists: Last day for receiving.
- Feb. 21—TUESDAY ....Voting Lists: Last day for receiving.
- Feb. 25—SATURDAY....Newcastle and London Branch Quarterly Meetings.
- Mar. 3—SATURDAY....General Quarterly Meeting—Manchester.
- Mar. 24—SATURDAY....Quarter Day.
- April 14—SATURDAY....Nomination Lists: Last day for receiving.
- May 22—TUESDAY ....Voting Lists: Last day for receiving.
- May 26—SATURDAY....Newcastle and London Branch Quarterly Meetings.
- June 2—SATURDAY....General Quarterly Meeting—Manchester.
- June 23—SATURDAY....Quarter Day.
- July 14—SATURDAY....Nomination Lists: Last day for receiving.
- Aug. 21—TUESDAY ....Voting Lists: Last day for receiving.
- Aug. 25—SATURDAY....Newcastle and London Branch Quarterly Meetings.
- Sept. 1—SATURDAY....General Quarterly Meeting—Manchester.
- Sept. 22—SATURDAY....Quarter Day.
- Oct. 13—SATURDAY....Nomination Lists: Last day for receiving.
- Nov. 20—TUESDAY ....Voting Lists: Last day for receiving.
- Nov. 24—SATURDAY....Newcastle and London Branch Quarterly Meetings.
- Dec. 1—SATURDAY....General Quarterly Meeting—Manchester.
- Dec. 22—SATURDAY....Quarter Day.



THE  
SCOTTISH  
Co-operative Wholesale Society  
LIMITED.

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PLATES, ADVERTISEMENTS, STATISTICS, &c.

PAGES 85 TO 124.



REGISTERED OFFICE, GROCERY AND PROVISION, AND DRAPERY WAREHOUSES, 119, PAISLEY ROAD, GLASGOW.--See pages 88 to 101, 106.



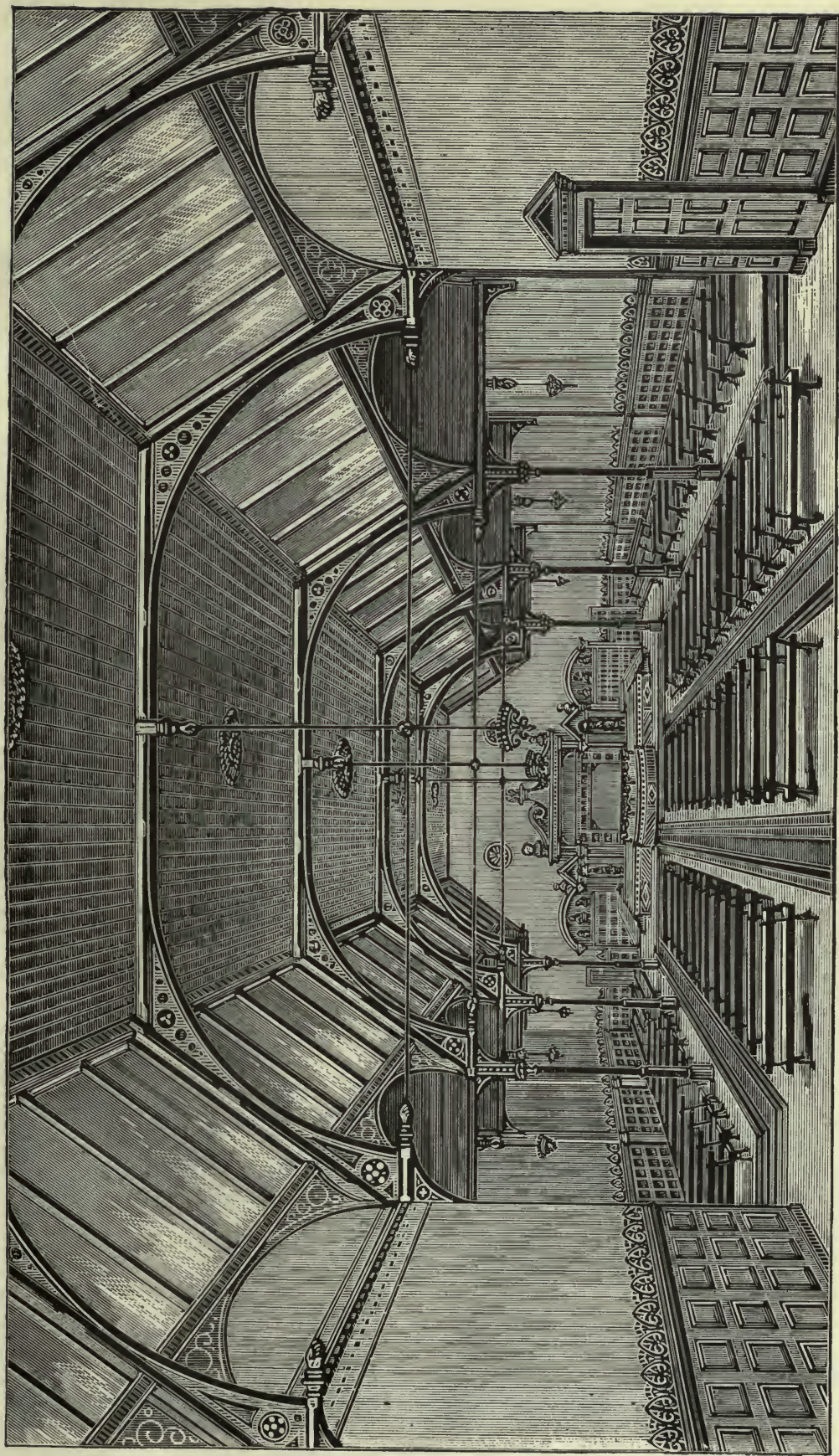




GLASGOW GROCERY AND PROVISION WAREHOUSE AND HALL, CLARENCE STREET,  
*See pages 88 to 101, 106.*



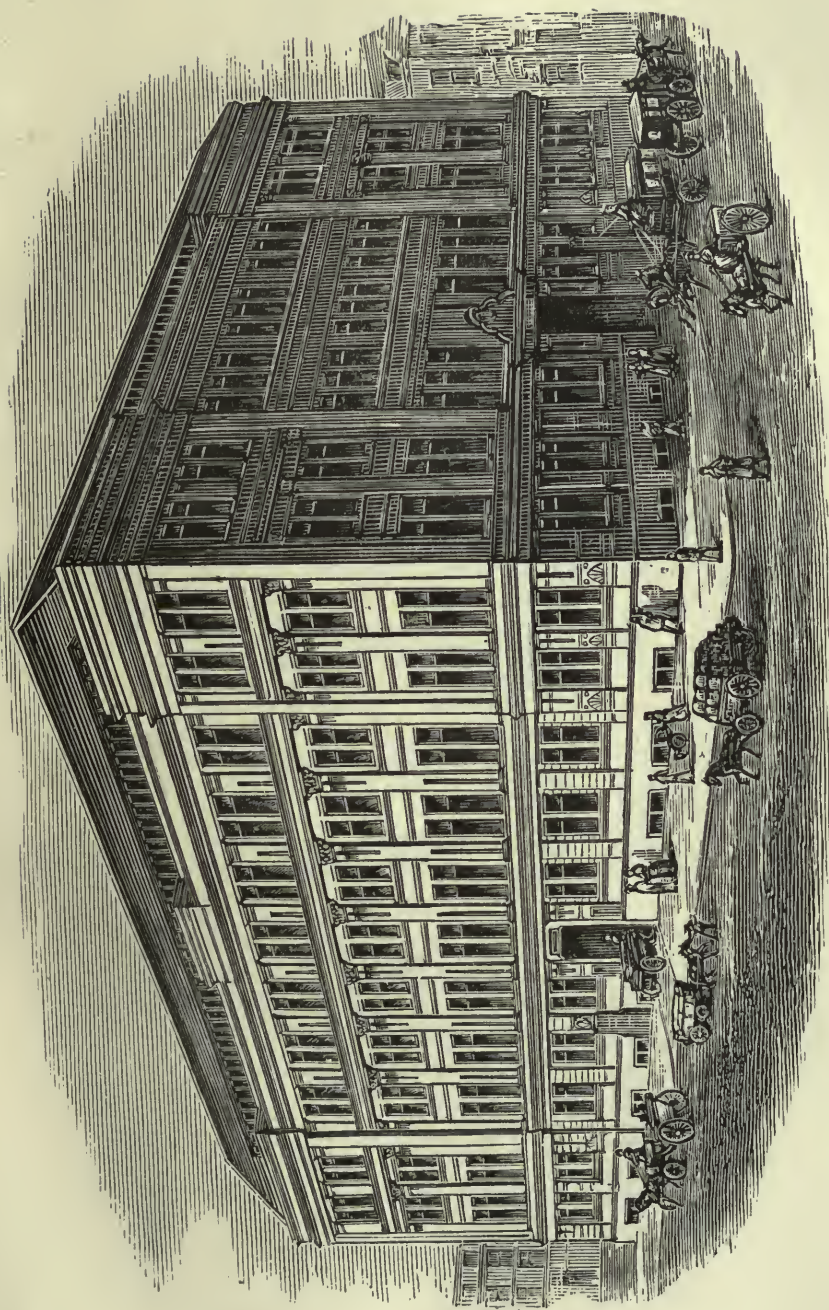




PLAN OF INTERIOR OF CO-OPERATIVE HALL, CLARENCE STREET, GLASGOW.



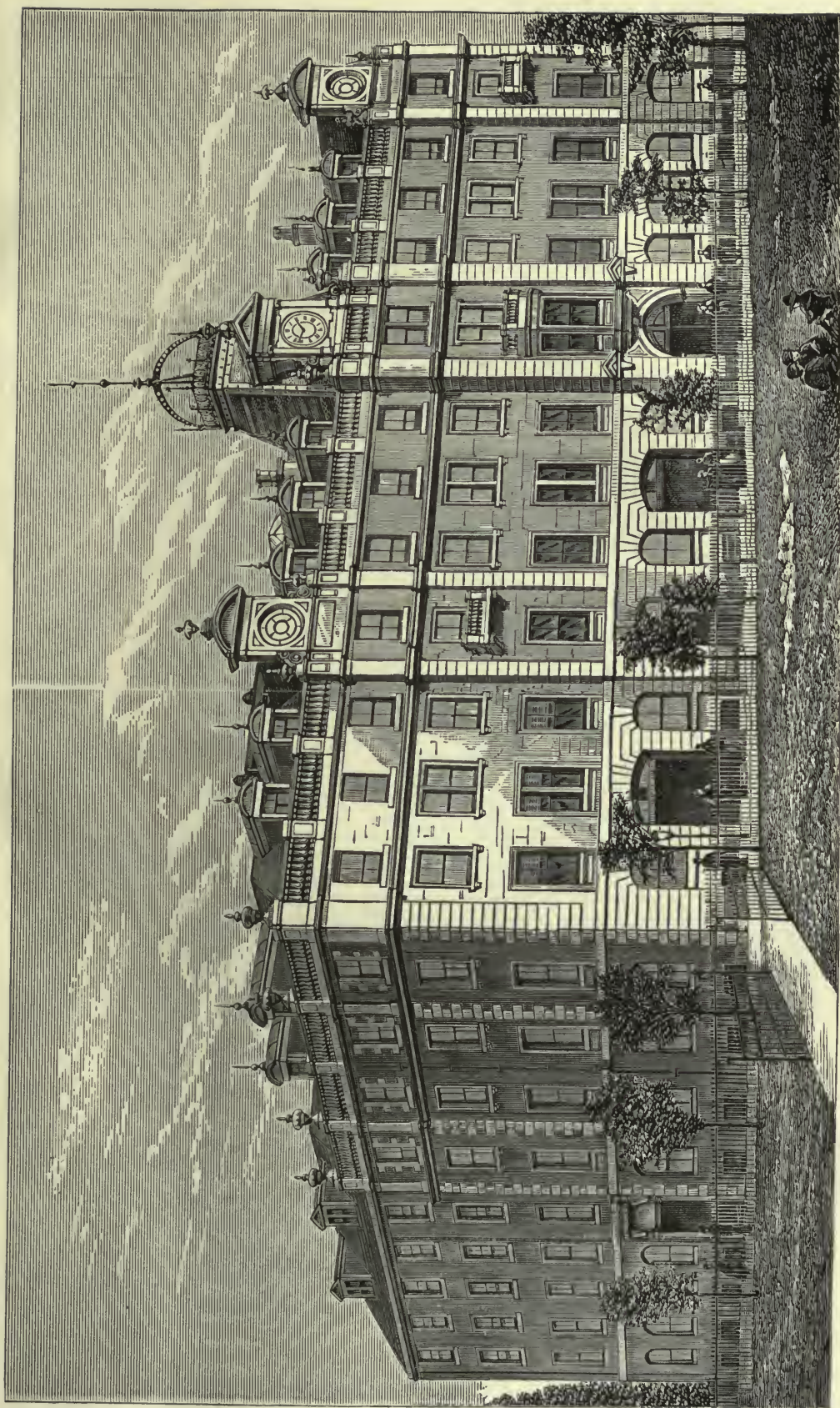




GLASGOW BOOT AND SHOE FACTORY AND FURNITURE WAREHOUSE, DUNDAS STREET.  
*See pages 111 to 119.*



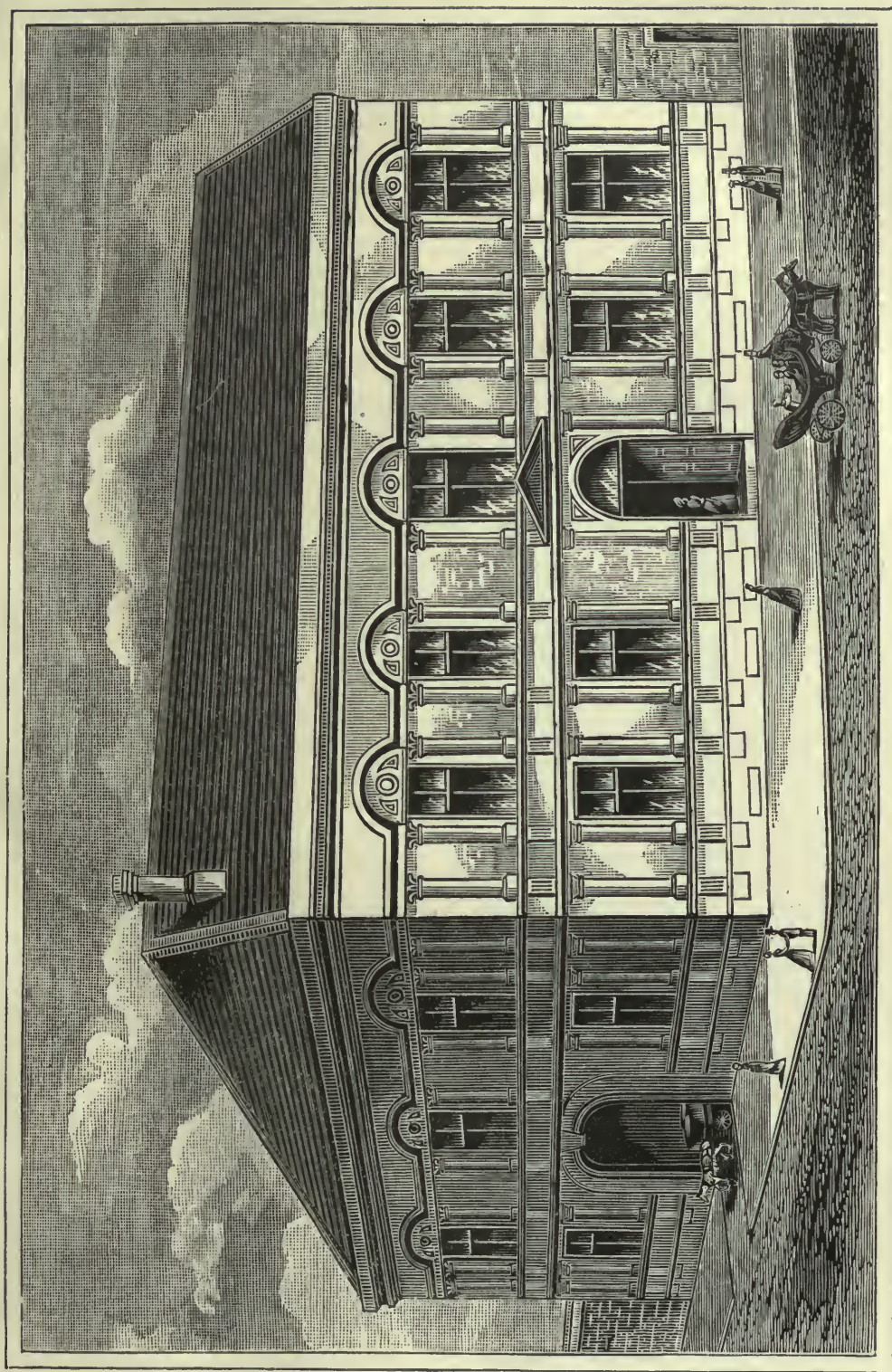




LEITH GROCERY AND PROVISION WAREHOUSE, LINKS PLACE.—See pages 88 and 103.



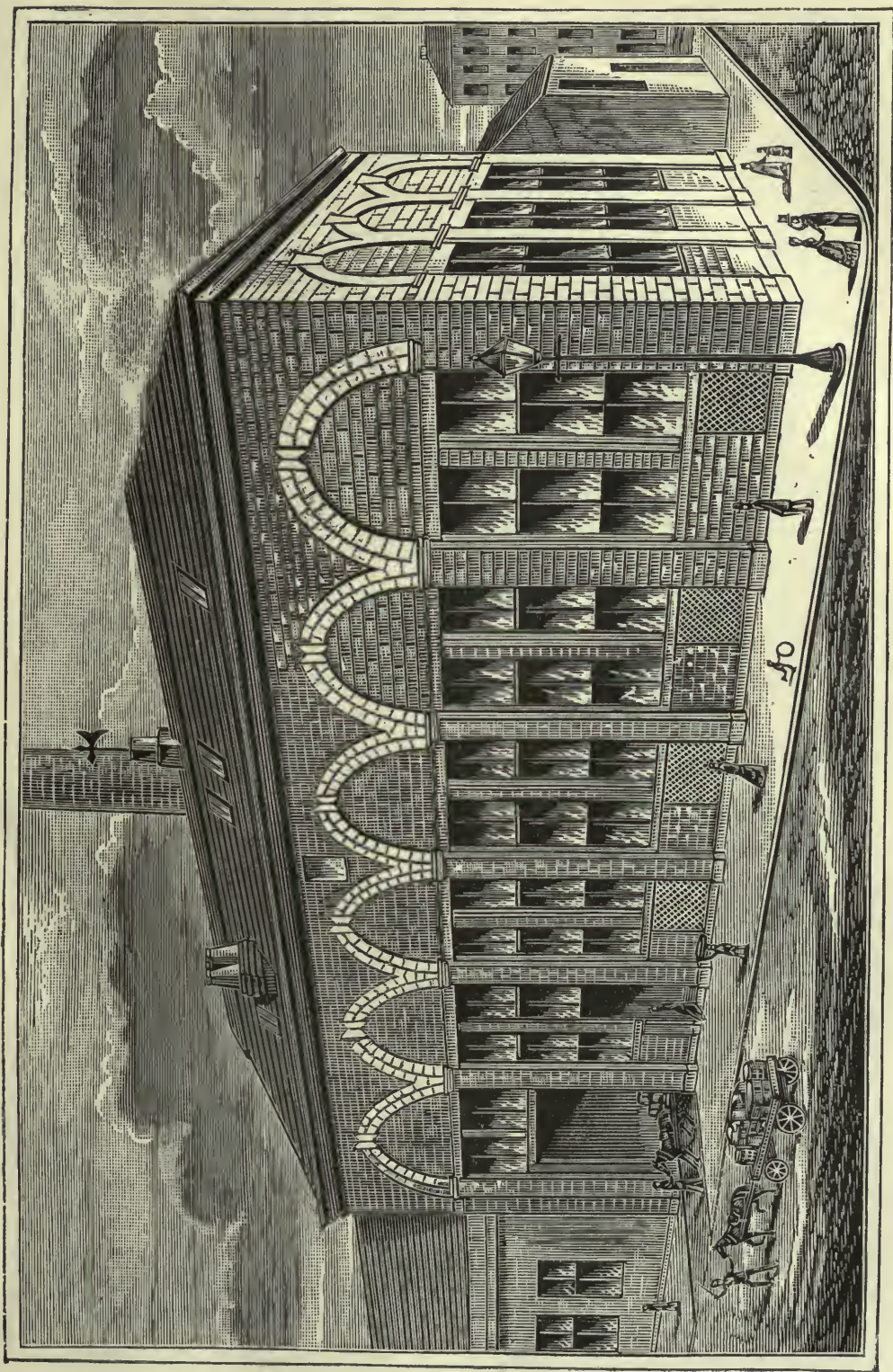




KILMARNOCK GROCERY AND PROVISION WAREHOUSE, GRANGE PLACE.—See pages 88 and 104.



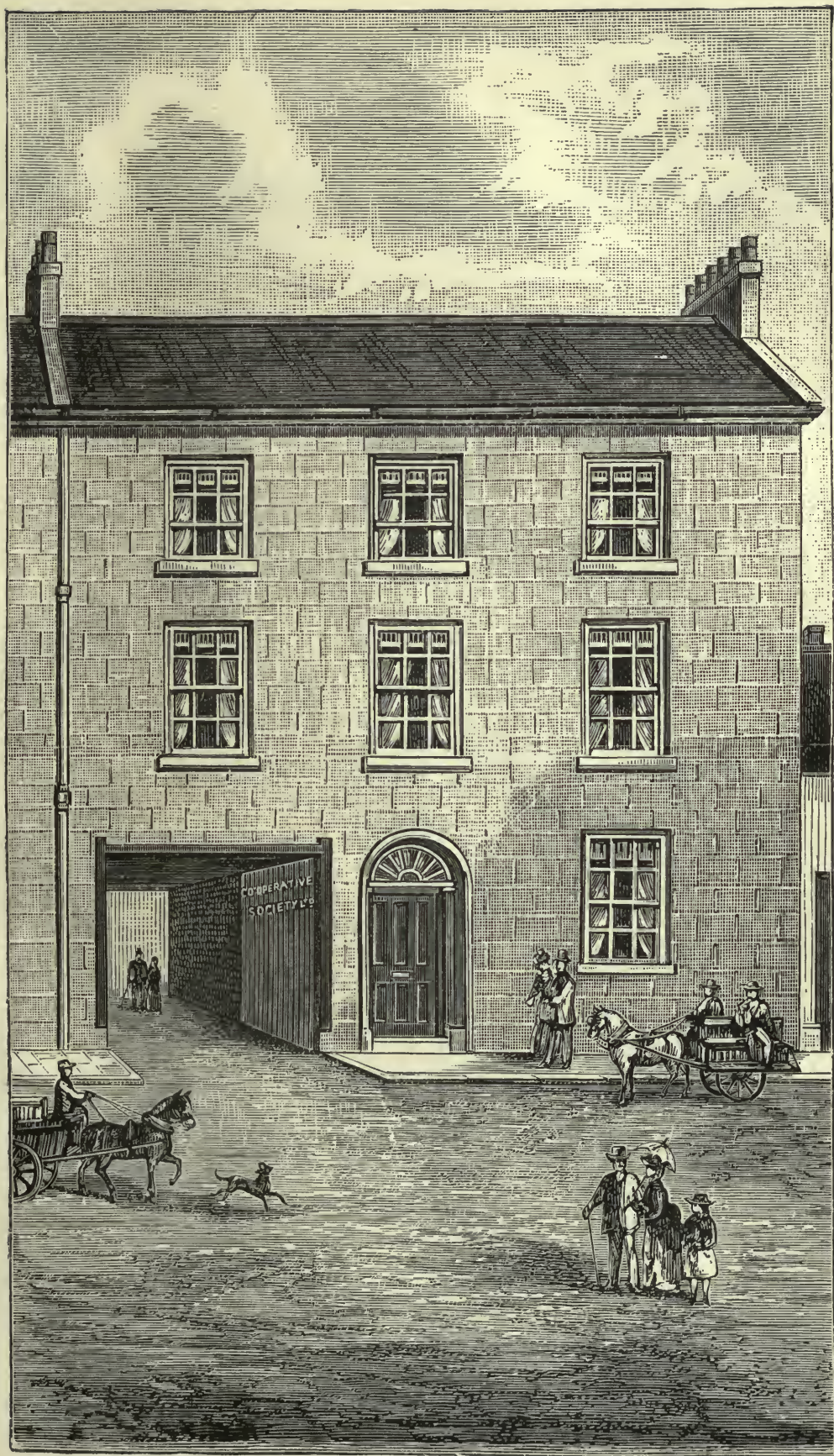




DUNDEE GROCERY AND PROVISION WAREHOUSE, TRADES LANE.—See pages 88 and 105.







ENNISKILLEN DEPOT.—BUTTER, EGGS, AND BACON.—See page 100.





# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

*Enrolled 20th April, 1868, under the provisions of the Industrial and Provident Societies Act, 20th August, 1867, 30 and 31 Vict., cap. 117, sec. 4.*

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**BUSINESS COMMENCED 8th SEPTEMBER, 1868.**

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REGISTERED OFFICE, GROCERY AND PROVISION, AND DRAPERY WAREHOUSES:

119, PAISLEY ROAD, GLASGOW.

BOOT AND SHOE FACTORY AND FURNITURE WAREHOUSE:

DUNDAS STREET, GLASGOW.

FURNITURE WORKSHOPS:

CLARENCE AND HOUSTON STREETS, GLASGOW.

READY-MADE DRAPERY DEPARTMENTS:

ST. JAMES AND MORRISON STREETS, GLASGOW.

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**BRANCHES:**

LINKS PLACE, LEITH.

GRANGE PLACE, KILMARNOCK.

TRADES LANE, DUNDEE.

ENNISKILLEN, IRELAND.

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**TEA AND COFFEE DEPARTMENT:**

HOOPER SQUARE, LEMAN STREET, WHITECHAPEL, LONDON.

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**BANKERS:**

THE UNION BANK OF SCOTLAND LIMITED.

**HEAD OFFICES:**

GLASGOW:

Ingram Street.

MANAGER:

CHARLES GAIRDNER.

LONDON:

62, Cornhill, E.C.

MANAGER:

JOHN A. FRADGLEY.

EDINBURGH:

George Street.

MANAGER:

HENRY HAY NORIE.



MR. JOHN ALEXANDER, Paisley. | MR. JOHN MILLEN, Rutherglen.  
MR. JAMES INGLIS, Paisley.

# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

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## MANAGER.

MR. JAMES MARSHALL, GLASGOW.

## CASHIER.

MR. ALLAN GRAY, GLASGOW.

## ACCOUNTANT.

MR. ROBERT MACINTOSH, GLASGOW.

## BUYERS, SALESMEN, &c.

### GROCERY AND PROVISION DEPARTMENTS.

|                                    |              |
|------------------------------------|--------------|
| MR. E. ROSS .....                  | GLASGOW.     |
| MR. J. MACDONALD.....              | GLASGOW.     |
| MR. R. REYBURN.....                | GLASGOW.     |
| MR. W. F. STEWART .....            | LEITH.       |
| MR. PETER ROBERTSON .....          | LEITH.       |
| MR. JAMES BLACK .....              | KILMARNOCK.  |
| MR. W. LAIRD .....                 | KILMARNOCK.  |
| MR. J. BARROWMAN .....             | DUNDEE.      |
| MR. ....                           | ENNISKILLEN. |
| MR. CHARLES FIELDING (Tea) .....   | LONDON.      |
| MR. JOHN M'INTYRE (Potatoes) ..... | GLASGOW.     |
| MR. JOHN WHITE (Potatoes).....     | LEITH.       |
| MR. N. ANDERSON (Traveller) .....  | GLASGOW.     |

### DRAPERY DEPARTMENT.

|                                                  |          |
|--------------------------------------------------|----------|
| MR. DAVID GARDINER .....                         | GLASGOW. |
| MR. J. D. STEWART (Traveller) .....              | GLASGOW. |
| MR. JAMES WARDROP (Traveller) .....              | GLASGOW. |
| MR. ALEX. L. SCOTT (Boot and Shoe Factory) ..... | GLASGOW. |
| MR. WILLIAM MILLER (Furniture).....              | GLASGOW. |
| MR. R. A. BROWN (Furniture Traveller) .....      | GLASGOW. |

# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

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*Registered Office:* 119, PAISLEY ROAD, GLASGOW.

*Branches:* LINKS PLACE, LEITH; GRANGE PLACE, KILMARNOCK; TRADES LANE, DUNDEE; ENNISKILLEN, IRELAND; HOOPER SQUARE, LEMAN STREET, WHITECHAPEL, LONDON.

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## BUSINESS ARRANGEMENTS.

Societies or Companies Registered (to which our trade is strictly confined) desirous of opening an account with this Society, will please forward a copy of the registered Rules and latest issued balance sheet. If newly started, a statement showing the number of members; value of shares; amount subscribed for and paid up; weekly turn-over expected; also, if credit is allowed, the amount per member in proportion to the capital paid up. The information forwarded will be carefully considered, and if found satisfactory, goods will be supplied on the usual business terms.

## CASH PAYMENTS.

Besides the usual invoice sent with each consignment of goods, a weekly statement of accounts (see page 88), is sent to each society, so that there may be no delay in remitting the amount due for the month, the limit of credit allowed by this Society. Interest at the rate of 5 per cent per annum is charged on all over-due accounts, and by a resolution adopted at a general meeting of the members, the committee of management are instructed and empowered to examine the books of defaulting societies and take the necessary steps to protect the interest of the federated societies.

## BUSINESS NOTICE.

When ordering goods state price or brand of the article wanted, also mode of transit, and name of station to which the goods are to be sent. Orders for the different departments should be written on separate slips. Goods not approved of must be returned at once and intact. No claim for breakage, short weight, &c., can be entertained unless made within six days after goods are received. Delay in delivery should be at once advised.



# WEEKLY STATEMENT OF ACCOUNT.

5TH WEEK.  
73RD QUARTER.

LEDGER FOLIO, 929.  
119, PAISLEY ROAD,  
GLASGOW, September 3rd, 1887.

*The Grahamston and Bainsford Co-operative Society Limited.*

Dr. **To The Scottish Co-operative Wholesale Society Limited.** Cr.

| GOODS.    |                         |                         | CASH AND CREDITS. |         |             |          |
|-----------|-------------------------|-------------------------|-------------------|---------|-------------|----------|
| Date.     | Amount of each Invoice. | Balance last Statement. | Date.             | Cash.   | Credit.     | Totals.  |
|           | £ s. d.                 | £ s. d.                 |                   | £ s. d. | £ s. d.     | £ s. d.  |
| Aug. 30.. | 0 4 3                   | 698 7 2                 | Aug. 30..         | ....    | 0 5 0       | ....     |
| " 30..    | 18 11 7                 | ....                    | " 31..            | ....    | 1 0 0       | ....     |
| " 30..    | 29 0 8                  | ....                    | " 31..            | ....    | 0 12 9      | ....     |
| " 30..    | 32 4 0                  | ....                    | " 31..            | ....    | 0 12 10     | ....     |
| " 30..    | 0 17 7                  | ....                    | Sept. 1..         | ....    | 0 5 6       | ....     |
| " 30..    | 4 10 0                  | ....                    | " 1..             | ....    | 0 1 0       | ....     |
| " 30..    | 4 4 0                   | ....                    | " 1..             | ....    | 1 3 6       | ....     |
| " 30..    | 3 2 6                   | ....                    | " 1..             | ....    | 2 7 0       | ....     |
| " 31..    | 0 6 6                   | ....                    | " 2..             | ....    | 0 12 9      | ....     |
| " 31..    | 0 8 3                   | ....                    | " 2..             | ....    | 0 12 9      | ....     |
| " 31..    | 0 10 10                 | ....                    | " 2..             | ....    | 0 14 9      | ....     |
| " 31..    | 0 8 3                   | ....                    | " 2..             | ....    | 0 10 0      | ....     |
| " 31..    | 1 5 0                   | ....                    | " 3..             | ....    | 0 15 6      | ....     |
| " 31..    | 0 10 11                 | ....                    | " 3..             | ....    | 10 11 1     | ....     |
| " 31..    | 59 16 9                 | ....                    | " 3..             | ....    | 0 15 6      | ....     |
| " 31..    | 0 11 3                  | ....                    | " 3..             | ....    | 1 12 0      | ....     |
| " 31..    | 7 3 5                   | ....                    |                   |         |             | 22 11 11 |
| Sept. 1.. | 2 10 6                  | ....                    | " 2..             | 600 0 0 | ....        | 600 0 0  |
| " 1..     | 4 17 6                  | ....                    |                   |         |             |          |
| " 1..     | 0 15 2                  | ....                    |                   |         |             |          |
| " 3..     | 0 6 6                   | ....                    |                   |         |             |          |
| " 3..     | 0 9 2                   | ....                    |                   |         |             |          |
| " 3..     | 17 10 0                 | ....                    |                   |         |             |          |
| " 3..     | 0 18 0                  | ....                    |                   |         |             |          |
| " 3..     | 3 10 6                  | ....                    |                   |         |             |          |
| " 3..     | 5 13 8                  | ....                    |                   |         |             |          |
| " 3..     | 12 11 1                 | ....                    |                   |         |             |          |
| " 3..     | 4 18 7                  | ....                    |                   |         |             |          |
| " 3..     | 5 3 6                   | ....                    |                   |         |             |          |
| " 3..     | 0 12 9                  | ....                    |                   |         |             |          |
| " 3..     | 0 1 10                  | ....                    |                   |         |             |          |
| " 3..     | 2 14 9                  | ....                    |                   |         |             |          |
| " 3..     | 1 8 6                   | ....                    |                   |         |             |          |
| " 3..     | 27 12 8                 | ....                    |                   |         |             |          |
|           | To balance,             | 255 10 5                |                   |         | By balance, | 331 5 8  |
|           | £                       | 953 17 7                |                   |         | £           | 953 17 7 |

*If the above Statement differs from your Books, we shall be glad if you will point out the difference at once.*

# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## MEMBERSHIP.

The Rules relating to the admission of members are:—

No. 6.—The society (that is, the Wholesale) shall consist of such co-operative societies, registered or deemed to be registered under the Industrial and Provident Societies Act, 1876, or Companies Act, 1862–67, as have been admitted by the committee, and each admission must be entered in the minute book of the society. Every application for shares must be sanctioned by a resolution of a general meeting of any society or company making such. The application must be made on the printed form supplied, and duly attested by the signatures of the president, secretary, and three members thereof, and stamped with such society's seal. Every society or company making an application for shares shall state the number of its members, and take not less than one share for each member, and shall increase the number annually as its members increase, in accordance with its last return to the Registrar; but no member other than a society registered under the Industrial and Provident Societies Act, 1876, shall hold an interest in the funds exceeding £200.

No. 7.—The capital of the society shall be raised in shares of fifteen shillings each. Every member on admission shall pay the sum of not less than one shilling on each share taken up, and the unpaid portion of the shares may be paid up by dividends and interest; but any member may pay up shares in full or part at any time.

### APPLICATION FORM.

*Whereas, by a resolution of the.....Co-operative Society Limited, passed at a general meeting held on the....day of....., it was resolved to take up.....shares (being one share of fifteen shillings for each member), said shares being transferable, in the Scottish Co-operative Wholesale Society Limited, and to accept the same on the terms and conditions specified in the Rules. Executed under the seal of the society on the....day of .....*

*Attested by*

.....  
.....  
..... } *Three Members.*

## BENEFITS DERIVED FROM MEMBERSHIP.

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(a) The liability of the member is limited, each member being only responsible for the value of the shares held.

(b) Members receive double the rate of dividend on purchases paid to non-members.

(c) Share capital is paid 5 per cent per annum.

(d) Members have a share in the management of the Wholesale in proportion to the amount of goods bought, as each society, besides one vote in right of membership, is allowed an extra vote for each £1,000 worth of goods bought.

These advantages, added to the special benefits secured by the leading position of the Wholesale, will, we trust, induce societies as yet non-members to carefully reconsider the question, and take the necessary steps to secure to their members the full benefits of co-operative distribution.

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## CORRESPONDENCE.

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All letters must be addressed to the society, and not to individuals. Addressed envelopes are supplied at cost price. Separate slips ought to be used for the different departments—the Accountant's, Grocery and Provision, Drapery, Boot and Shoe, Furniture. The slips can all be enclosed in the one envelope. Attention to this simple rule will greatly facilitate the despatch of goods, and ensure promptitude in answering inquiries; it will also aid in the classification of the letters for reference in any case of irregularity or dispute.

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# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## CASH REMITTANCE.

Cheques must be made payable to the Society. If remitted through the UNION BANK OF SCOTLAND LIMITED, the usual commission charged will be saved.

## LIST OF BRANCHES OF THE UNION BANK OF SCOTLAND LIMITED.

HEAD OFFICES:—GLASGOW, INGRAM STREET; EDINBURGH, GEORGE STREET.

LONDON OFFICE:—62, CORNHILL, E.C.

### Branches:

|                           |                         |                           |
|---------------------------|-------------------------|---------------------------|
| Aberdeen.                 | Edinburgh, Morningside. | Lerwick.                  |
| Aberdeen, George Street.  | „ Newington.            | Leslie.                   |
| „ West End.               | „ Norton Park.          | Lochgelly, Fifeshire.     |
| Aberfeldy.                | „ S. Morningside        | Lochgilphhead.            |
| Aberlour, Strathspey.     | (sub to Morningside).   | Macduff.                  |
| Alloa.                    | Edzell.                 | Maryhill.                 |
| Alva.                     | Elgin.                  | Maybole.                  |
| Auchterarder.             | Ellon.                  | Mearns (open on Tues-     |
| Auchtermuchty.            | Errol.                  | days and Fridays—sub      |
| Ayr.                      | Fochabers.              | to Barrhead).             |
| Ballater.                 | Forfar.                 | Millport.                 |
| Banchory.                 | Fraserburg.             | Moffat.                   |
| Banff.                    | Galston.                | Moniaive.                 |
| Barrhead.                 | Gatehouse.              | New Pitsligo.             |
| Barrhill.                 | Girvan.                 | Paisley.                  |
| Bathgate.                 | Glasgow, Anderston.     | Partick.                  |
| Beith.                    | „ 174, Argyle St.       | Perth.                    |
| Blair-Athole (sub to Pit- | „ Bridgeton Cross.      | Peterhead.                |
| lochrie).                 | „ Cowcaddens.           | Pitlochrie.               |
| Blairgowrie.              | „ Hillhead.             | Port-Glasgow.             |
| Braemar.                  | „ Kinning Park.         | Portsoy.                  |
| Brechin.                  | „ St. Vincent St.       | Renfrew.                  |
| Bridge of Allan.          | „ Tradeston.            | Rosehearty.               |
| Buckie, Banffshire.       | „ Trongate.             | St. Margaret's Hope,      |
| Castle-Douglas.           | Gourock.                | Orkney.                   |
| Coatbridge.               | Govan.                  | Scalloway, Shetland (open |
| Coupar-Angus.             | Greenock.               | on Tuesdays and Fri-      |
| Crieff.                   | Hamilton.               | days—sub to Lerwick).     |
| Cullen.                   | Helensburgh.            | Shawlands, Glasgow.       |
| Dalbeattie.               | Huntly.                 | Stewarton.                |
| Dalry, Ayrshire (open on  | Inverary.               | Stirling.                 |
| Thursdays—sub to Beith)   | Inverness.              | Stonehouse (open on Mon-  |
| Dalry, Galloway.          | Inverurie.              | days, Wednesdays, and     |
| Darvel (sub to Galston).  | Irvine.                 | Saturdays—sub to Lark-    |
| Downe.                    | Johnstone.              | hall).                    |
| Dumbarton.                | Keith.                  | Stranraer.                |
| Dumfries.                 | Killin.                 | Strathaven.               |
| Dunblane.                 | Kilmarnock.             | Stromness.                |
| Dundee.                   | Kincardine.             | Tarbert, Lochfine.        |
| Dunkeld.                  | Kirkcaldy.              | Tarland.                  |
| Dunning.                  | Kirkwall.               | Thornhill.                |
| Dunoon.                   | Kirriemuir.             | Tillicoultry.             |
| Edinburgh, Downie Place.  | Ladybank.               | Troon.                    |
| „ Forrest Road.           | Largs.                  | Turiff.                   |
| „ Haymarket.              | Larkhall.               | Wick.                     |
| „ Hunter Square           | Leith.                  |                           |

## TO THE MEMBERS.

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FELLOW-CO-OPERATORS,

THE proved usefulness and general utility of the first issue of our joint "Annual" furnishes a sufficient reason to your Directors for a second publication. The information contained in the issue for 1887 afforded the means of making comparisons, building up arguments, following out results, and of estimating present and future contingencies, in connection with the co-operative movement in Great Britain, in a way unattainable before by the great body of our co-operative brethren. Even to those who merely desired to learn the history, through facts and figures, of co-operative effort in England and Scotland, and to make themselves in some degree familiar with the system and means of carrying on our great Wholesale concerns—even to those the "Annual" for 1887 has proved a veritable and ever-ready handbook, a *vade mecum* for reference in all cases of personal and general inquiry. But outside and beyond any claim which the "Annual" possessed on the score of mere usefulness, it also supplied a fund of illustration, statement and narrative, to those who merely sought the aid of its pages for purposes of entertainment, and the satisfaction of intelligent curiosity. From all your Directors can learn, the "Annual" for last year has been warmly received and highly valued by our members, and we feel sure that the hearty welcome accorded to the first issue will not be denied to the second. Then, the reasons which influenced your Directors in deciding to take part in the issue of a joint publication are as strong in 1888 as in the past year. Our investments of capital for purposes of business, for securing thorough economy as well as for the general conduct of trade transactions, are still increasing, and with every step in this increase adding to the difficulties and the responsibilities not only of those who may for the time being be in charge, but of the entire federation. Then, as the information contained in our first issue has proved at once useful and interesting, that of the second, being the outcome of a wider experience and more extended survey, must have increased attractions for all, and be more and more the means of making the scattered bodies or varied sections of co-operators all over the country become more familiar and friendly with each other. This is the highest purpose of our "Annual;" and, while your Directors speak thus for themselves, they know it is also the aim and desire of our brethren of the English Wholesale, to whom we have been indebted on many occasions for friendly counsel and efficient help, besides the assistance we derive from their longer experience and more extended operations.

Yours respectfully,

THE COMMITTEE.



THE  
**Scottish Co-operative Wholesale Society**  
 LIMITED.

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THE GENERAL OBJECT.

THE Scottish Co-operative Wholesale Society was instituted in 1868 to form a centre of supply, and a means of securing to the distributive societies in Scotland a more economic, certain, and safe *method* of supply. It was instituted with the view of saving the profits which must otherwise have gone to the middleman, of drawing the whole co-operative body in Scotland together, and of binding this body together by the ties of interest, similarity of aim and pursuit, and that feeling of brotherhood and sympathy which lies at the root of all real advances in general comfort and well-being.

ITS ESSENTIAL PURPOSE.

Its essential purpose is that of trade, and its direct methods must ever be subordinated to considerations of commercial wisdom, while its collateral or incidental tendencies are toward the higher moral purposes, of making men better, and of increasing the desire and the means to help each other. It aims first to make the members of the co-operative body better in position, in anticipation that a bettering of the spirit—in wider intelligence and nobler purpose—will follow. It seeks to prove, by tangible realities, that members of the co-operative fraternity can, without exterior help, import greater comfort into their homes, infuse a growing independence into their social position, and, by stirring the feeling of self-reliance and self-respect, to promote, in some degree, a growth of the higher attributes of the human character. These effects are sought and—in their partial realisation—attained by working through and aiding the individual societies in the federation in *their* efforts to make savings for the consumer and to improve the status of the working man.

The Wholesale cannot reach the individual except by means that are properly indirect, since individuals form no part of its constituency; but, as every individual member of the affiliated distributive society has the privilege to examine, to watch the progress and the good which the Wholesale is making and doing, he can equally judge of and apply to himself the benefits which the Wholesale secures to his society. As quarter after quarter succeeds, and successive balance sheets show a constantly growing business, the individual member experiences a growing conviction that he is on solid ground—that he is in pace with a movement whose foundations are secure, whose goal is clearly seen, whose aim and scope is practical and sensible, and whose ultimate result can only be in advantages to all who care and are wise enough to secure them.

ITS EFFECTS.

THE increasing knowledge of the economics of trade and labour, and of the wonderful power of combination, is gradually giving to the industrial classes a



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 THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY : THE GENERAL OBJECT.
 

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capacity of apprehension, and of appreciation in business matters, found only, afore-time, among the purely commercial classes. This knowledge never could have grown so rapidly, never could have attained its present dimensions, but for the wider field, the previously unthought-of capacities of intelligent, rational, and loyal federation, which the methods and outcome of the Wholesale policy has opened to the view of every co-operator in Scotland. In this way the Scottish Co-operative Wholesale Society has conferred a boon of inestimable value upon the whole movement.

#### COMMUNITIES OF INTERESTS.

THE small quarterly or half-yearly meetings in the rural village store, or the country town society, with their petty details and limited outlook, their uncertain gropings after something better,—with the general tendency to hold on to present even though defective methods—these have, by the existence and activity of the Wholesale, been fired with new zeal, because, permeated with new ideas and possibilities, they have evinced a spirit of greater liberality and unity of purpose. The country society is no longer, or need be no longer, an isolated and moribund unit—unless from morbid choice—in the co-operative movement; and the association “in denser city pent” feels that with all its conveniences of supply friendly relations with its “country cousins” are neither to be despised on points of wisdom nor of benefit. To all alike the Wholesale offers its advantages, because these are but the creation of the general body—the total outcome of combined effort and intelligent guidance. The co-operator in town or country tacitly or openly acknowledges—because he has been made to feel—the power and benefits of combination, and that in a way he never could have felt but for the presence and influence of the Wholesale, and the teachings which its operations are ever presenting.

#### COMBINATION NECESSARY.

THE co-operative movement should never be regarded as a mere congeries of societies that may, or may not meet together; that need not influence each other except by chance; but be allowed to move forward or backward, experience good or evil fortune, without exciting congratulation, or drawing forth sympathy. The single, the isolated society, can do nothing beyond living for itself—and this only so long as it meets with no mishap. Men, and societies of men, are alike gregarious, and need the company of their fellows. As the ostracised unfortunate fades in intellect and decays in all the higher attributes of his race, so the isolated co-operative society that holds aloof from all communication of knowledge, experience, or mutual advantage with its correlated societies, becomes stagnant and loses utterly the idea of progress. This statement will be frankly admitted by anyone who knows, or who will inquire into the condition of, the co-operative movement in Scotland, previous to the establishment of the Wholesale, and compare it with the condition the movement now maintains in the country. On this point the pages of Mr. G. J. Holyoake’s “History,” and those of the earlier writers on social questions, will furnish abundant and striking examples. As inferential proof, no better or readier method need be sought than is presented in the rapid growth of the wholesale trade and general spread of the movement during the years that have succeeded its commencement. The following table will tell its own tale:—

## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

STATEMENT showing the PROGRESS of the SOCIETY FROM ITS COMMENCEMENT in September, 1868, till date, with  
COMPARISONS of SALES, and other information.

|                   | Year<br>or<br>Quarter<br>ending | Number of<br>Shares<br>Subscribed. | Capital:<br>Includes Share,<br>Loan, Reserve,<br>and Insurance<br>Funds. | Net Sales. | Gross Total. | Increase on<br>Corresponding<br>Quarter<br>or previous<br>Year. | Rate<br>per Cent<br>Inc. | Expenses. | Rate<br>per £<br>on<br>Sales. |
|-------------------|---------------------------------|------------------------------------|--------------------------------------------------------------------------|------------|--------------|-----------------------------------------------------------------|--------------------------|-----------|-------------------------------|
| 1st Quarter....   | December 7, 1868..              | ..                                 | £<br>1,795                                                               | £<br>9,697 | £<br>..      | £<br>..                                                         | ..                       | £<br>153  | 3·8                           |
| 1st Year—52 wks   | December 5, 1869..              | ..                                 | 5,174                                                                    | 81,094     | 90,791       | ..                                                              | ..                       | 1,035     | 3·0                           |
| 2nd " 50 "        | November 19, 1870..             | ..                                 | 12,542                                                                   | 105,249    | 196,041      | 24,155                                                          | 29·7                     | 1,549     | 3·5                           |
| 3rd " 52 "        | " 18, 1871..                    | ..                                 | 18,009                                                                   | 162,658    | 358,699      | 57,408                                                          | 54·5                     | 2,180     | 3·2                           |
| 4th " " "         | " 16, 1872..                    | 18,708                             | 30,931                                                                   | 262,530    | 621,230      | 99,872                                                          | 61·4                     | 3,469     | 3·1                           |
| 5th " " "         | " 15, 1873..                    | 21,271                             | 50,433                                                                   | 384,489    | 1,005,719    | 121,958                                                         | 46·4                     | 5,055     | 3·1                           |
| 6th " " "         | " 14, 1874..                    | 24,651                             | 48,981                                                                   | 409,947    | 1,415,667    | 25,458                                                          | 6·6                      | 6,693     | 3·9                           |
| 7th " " "         | " 13, 1875..                    | 27,112                             | 56,750                                                                   | 430,169    | 1,845,836    | 20,222                                                          | 4·9                      | 7,137     | 3·9                           |
| 8th " 51 "        | " 4, 1876..                     | 29,008                             | 67,218                                                                   | 457,529    | 2,303,365    | 27,359                                                          | 6·3                      | 7,540     | 3·9                           |
| 9th " 52 "        | " 3, 1877..                     | 31,945                             | 72,568                                                                   | 589,221    | 2,892,586    | 131,692                                                         | 28·7                     | 8,648     | 3·5                           |
| 10th " " "        | " 2, 1878..                     | 34,830                             | 83,173                                                                   | 600,590    | 3,493,177    | 11,369                                                          | 1·9                      | 10,095    | 4·0                           |
| 11th " " "        | " 2, 1879..                     | 36,008                             | 93,076                                                                   | 630,097    | 4,123,275    | 29,507                                                          | 4·9                      | 11,117    | 4·2                           |
| 12th " " "        | October 30, 1880..              | 41,584                             | 110,179                                                                  | 845,221    | 4,968,496    | 215,124                                                         | 34·1                     | 13,020    | 3·7                           |
| 13th " 53 "       | November 5, 1881..              | 49,073                             | 135,713                                                                  | 986,646    | 5,955,143    | 141,424                                                         | 16·7                     | 15,757    | 3·8                           |
| 14th " 52 "       | " 4, 1882..                     | 53,684                             | 169,428                                                                  | 1,100,588  | 7,055,732    | 113,942                                                         | 11·5                     | 19,686    | 4·2                           |
| 15th " " "        | " 3, 1883..                     | 59,529                             | 195,396                                                                  | 1,253,154  | 8,308,886    | 152,565                                                         | 13·8                     | 22,120    | 4·2                           |
| 16th " " "        | " 1, 1884..                     | 65,331                             | 244,186                                                                  | 1,300,331  | 9,609,218    | 47,177                                                          | 3·7                      | 24,307    | 4·5                           |
| 17th " " "        | October 31, 1885..              | 70,066                             | 288,945                                                                  | 1,438,220  | 11,047,438   | 137,888                                                         | 10·6                     | 27,314    | 4·5                           |
| 18th " 60 "       | December 25, 1886..             | 79,874                             | 333,653                                                                  | 1,857,152  | 12,904,590   | 418,931                                                         | 29·1                     | 36,942    | 4·7                           |
| 74th Quar.—13 wks | March 26, 1887..                | 80,914                             | 353,321                                                                  | 390,990    | 13,295,581   | 35,364                                                          | 9·0                      | 8,367     | 5·1                           |
| 75th " " "        | June 25, 1887..                 | 84,165                             | 353,950                                                                  | 427,022    | 13,722,603   | 15,354                                                          | 3·7                      | 8,398     | 4·4                           |



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

STATEMENT showing the PROGRESS of the SOCIETY FROM ITS COMMENCEMENT in September, 1868, till date, with  
COMPARISONS of SALES, and other information.—Continued.

| 1st Quarter....    | Year<br>or Quarter<br>ending | Net Profit. | Total<br>Net Profit. | Aver-<br>age<br>Divi-<br>dend. | RESERVE AND INSURANCE FUNDS. |            | DEPRECIATIONS<br>ALLOWED ON BUILDINGS<br>AND FIXTURES. |               |
|--------------------|------------------------------|-------------|----------------------|--------------------------------|------------------------------|------------|--------------------------------------------------------|---------------|
|                    |                              |             |                      |                                | Added.                       | Withdrawn. | Total Amount.                                          | Total Amount. |
|                    |                              | £<br>48     | £<br>..              | d.<br>..                       | £<br>48                      | £<br>..    | £<br>9                                                 | £<br>..       |
| December 7, 1868.. |                              |             |                      |                                |                              |            |                                                        |               |
| 1st Year—52 wks    | December 5, 1869..           | 1,303       | 1,352                | 3½                             | 63                           | ..         | 129                                                    | 138           |
| 2nd " 50 "         | November 19, 1870..          | 2,418       | 3,770                | 4½                             | 324                          | ..         | 111                                                    | 250           |
| 3rd " 52 "         | " 18, 1871..                 | 4,131       | 7,992                | 5½                             | 578                          | ..         | 205                                                    | 455           |
| 4th " " "          | " 16, 1872..                 | 5,435       | 13,337               | 4½                             | 471                          | ..         | 346                                                    | 801           |
| 5th " " "          | " 15, 1873..                 | 7,445       | 20,783               | 4½                             | 355                          | 141        | 657                                                    | 1,439         |
| 6th " " "          | " 14, 1874..                 | 7,553       | 28,336               | 4½                             | 1,049                        | 104        | 784                                                    | 2,243         |
| 7th " " "          | " 13, 1875..                 | 8,232       | 36,569               | 4                              | 338                          | 580        | 321                                                    | 2,565         |
| 8th " " "          | " 4, 1876..                  | 8,836       | 45,405               | 4                              | 791                          | 672        | 452                                                    | 3,017         |
| 9th " " "          | " 3, 1877..                  | 10,925      | 56,330               | 4                              | 918                          | 343        | 485                                                    | 3,503         |
| 10th " " "         | " 2, 1878..                  | 11,968      | 68,298               | 4                              | 721                          | 269        | 1,155                                                  | 4,659         |
| 11th " " "         | " 2, 1879..                  | 14,988      | 83,287               | 4½                             | 2,215                        | 160        | 1,336                                                  | 5,995         |
| 12th " " "         | October 30, 1880..           | 21,685      | 104,973              | 6½                             | 3,134                        | 336        | 1,086                                                  | 7,082         |
| 13th " " "         | November 5, 1881..           | 23,981      | 128,954              | 6                              | 3,086                        | 2,694      | 1,653                                                  | 8,735         |
| 14th " " "         | " 4, 1882..                  | 23,219      | 152,174              | 5½                             | 3,824                        | 334        | 1,688                                                  | 10,424        |
| 15th " " "         | " 3, 1883..                  | 28,365      | 180,540              | 5½                             | 3,801                        | 1,530      | 2,420                                                  | 12,844        |
| 16th " " "         | " 1, 1884..                  | 29,434      | 209,974              | 5½                             | 4,428                        | 1,525      | 2,039                                                  | 14,884        |
| 17th " " "         | October 31, 1885..           | 39,641      | 249,616              | 6½                             | 4,393                        | 610        | 3,475                                                  | 18,359        |
| 18th " " "         | December 25, 1886..          | 50,398      | 300,014              | 6½                             | 5,528                        | 1,315      | 2,980                                                  | 21,340        |
| 74th Quar.—13 wks  | March 26, 1887..             | 9,657       | 309,672              | 7                              | 1,353                        | 201        | 692                                                    | 22,032        |
| 75th " " "         | June 25, 1887..              | 10,782      | 320,454              | 6                              | 3,466                        | ..         | 643                                                    | 22,676        |



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 THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY: THE GENERAL OBJECT.
 

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Reference of an instructive kind may also be had to the first issued balance sheet as a striking contrast to the one showing results of last quarter's business.

#### WHOLESALE CO-OPERATIVE PRODUCTION.

THIS improved position of the distributive societies is due largely to their connection with, and the advantages they owe to, the Wholesale, as a distributing and advising centre; though a considerable and growing part of it is traceable to the enlarged benefits which the productive enterprise of the Wholesale has brought within their reach. Considerable as are the profits which wholesale distribution secures, it is evident that an increased per centage must be reached when the manufacturers part, as well as that of the vendors, is made the property of the societies. It is not here pretended or insisted on, that the utmost or even average line of advantage has been reached in any department of the Wholesale's manufacturing industry. Some of the sections are but just begun, some are still in their tentative stages; while, in all, the Directors and managers alike are still feeling their way towards greater economies, dispatch, finish, and superiority. In the works yet to be undertaken, and for which premises, machinery, and other plant are being prepared, your Directors are conscious that many difficulties and financial dangers will have to be met and overcome, as similar complications have been met and overcome before; and your Directors feel confident that, with the support and loyalty of the members, the financial success of our schemes, and the excellence of our manufactures is assured. Hitherto—with slight variations of constancy—your Directors have had little cause to complain of the amount of support accorded by the members. This support not only gives them confidence as to the future of their productive operations, but assures them of the moral backing of the confederacy in the line they—by instruction of the members—have hitherto followed.

#### THE MORAL SUPPORT OF THE MEMBERS.

STILL, though this support follows, or may be expected to follow, the initiative of the members, your Directors readily acknowledge its value as a factor of future and ultimate success; and as a mainstay in their difficulties, and in the attacks which are from time to time made upon their whole policy, by those who insist upon the application of purely theoretical principles to co-operative production, and by others who merely attack our methods. Your Directors are fully aware of the difficulties of the subject, and possibly a real good may result from the pending wordy contest—somewhat Parthian and desultory in its nature—now maintained between the partisans of abstract correctness, and those who prefer to lend their aid and give their influence in favour of methods that are practical and attainable, and that carry with them the assurance of a reasonable measure of success. In our distributive efforts we have not stopped to inquire with too great minuteness into the laws which govern these transactions, but, taking in each case, and, as far as we could see, the straight line and honourable course to some desired end, have followed the same, in the seldom-disappointed hope that our efforts would result in benefits to our members. Such similar course we, your Directors, unless our present mandate be cancelled, intend to follow in the wider field and greater difficulties of productive co-operation.

## THE QUESTION OF PROFIT.

ALL this by way of definition, not of apology, as apology here is entirely beside the mark. The main point at issue between the parties referred to is the distribution and division of profit; but a prior and more important question is as to the nature and reality of profit. A bargain has been cleverly defined as a business transaction between two parties in which both conclude they have the advantage, *i.e.* the profit—for profit is not always represented or representable in mere coin of the realm. In the simple operation of buying at one price and selling at another and higher, the profit is at once declared. To grow or manufacture, and sell at a price, gives a much less clear view of the element of profit, and, though in exchanges in kind it is still present, its quantity and value is ever more difficult to find. We know exactly the amount of capital we have borrowed to prosecute our purposes, and we know also how much we are bound to pay for the use of that capital. We know also, in the employment of labour, what are the terms of our agreement with the workers. These are elements and factors in our productive enterprises that admit of clear and definite statement. But when we come to count the cost of management, to reckon the amount of depreciation in property, or of deterioration of machinery, the elements of exact statement disappear, and we are left to estimate, to judge, and to keep safe, and make sure that we are not giving away, in obedience to some dimly apprehended principle, the backbone and sinews of enterprise.

## THE PLACE OF THE WORKERS.

OUR industrial workers are not asked, as such, to contribute any part of the capital required, and they cannot be held responsible for any loss, should such occur, in our productive concerns. Still, when profits are made, the workers participate at the same rate per £ on wages as dividend on trade. Our co-operative brethren, allied with us in striving to make the Scottish Wholesale Society even more useful and profitable to the movement will, therefore, we hope, extend their support and approval to the policy, the system, and methods your Directors of the Wholesale have hitherto pursued, and that among other things for the reasons here advanced.

## NO RIVALRY.

OUR aim is not to set up and strive to build up any rival school of co-operative producers, but, in the efforts we find ourselves constrained to make, to follow the course which we believe is most likely to attain the object aimed at, and to produce beneficial results to those who, among our members, contribute their labour, their capital, or their patronage to our productive institutions, and that will entail no departure from the simple principles of honour and honesty we have hitherto followed.

## THE DEPARTMENTS.

In the short descriptive articles which follow, an attempt is made to set forth, somewhat more in detail than in last year's Annual, a view of the various lines of business—distributive and productive—in which the Scottish Wholesale is now embarked. From these the reader will gather a more comprehensive idea of the magnitude and variety of business now carried on in our different centres of distribution and manufacture, and perhaps see more clearly the necessity for a continuous and generous patronage of the institution he has helped to set up and keep going.



# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

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## GROCERY AND PROVISION DEPARTMENTS.

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WITH this department the Wholesale commenced business. It has continued to be the mainstay of our trade, and is likely, for at least some time to come, to embrace the largest portion of our sales. All the other departments are but natural developments of this one. As the volume of our trade increased, it was found necessary to separate and form the different departments in succession, and place at their head men, with the required special or technical knowledge, to superintend them.

The steady growth of our trade in this, our leading department, is the best possible proof that the goods supplied have given general satisfaction. Our aim has always been to buy the best quality of goods procurable, and such as were wanted, and sell them free from adulteration. We have spared no efforts to get direct to the producer in every class of goods, and our success in this direction has, no doubt, largely contributed to build up one of the largest businesses of this kind in Scotland.

It might not be uninteresting to mention the sources from which we draw our supplies, in some of the leading classes of goods we keep in stock; and we would here acknowledge the great benefits we derive from being associated with our friends at Manchester. The two great Wholesale Societies unite together, and purchase for each other, wherever this can be done to advantage. Our buying branches are Kilmarnock and Enniskillen. The former was started in 1878 for the purpose of purchasing direct from the farmer such goods as the district and surrounding counties produced, and which our societies required, viz., Cheese, Butter, Eggs, Pigs, Potatoes, Oats and Oatmeal, &c. Our name is now well and favourably known among the farmers in Ayrshire and surrounding counties as a firm that buys largely, and is safe to sell to, so that whatever advantages are derived from this, societies get the advantage of it.

The Enniskillen Branch was established in 1885 for the purpose of getting to the sources of supply there, so that we might be able to ship Eggs as fresh as it is possible to get them; supply the Butter produced there, which is noted for being very mild cured and delicate in flavour; and buying Pigs and curing our own Hams. Societies can send their orders direct to Enniskillen for either Butter or Eggs. They will thus get these fresh as they come into the market, and at the lowest possible prices.

### BUTTER.

WE believe that we are the largest shippers of Butter in Scotland. Our principal sources of supply are Copenhagen, Hamburg, Cork, and Enniskillen. In these markets we have now our own buyers, which enables us, not only to get a more reliable quality, but to get it at a cheaper rate than when bought from other Importers. We are thus able to give better value than formerly to our constituents.



## SUGAR.

WE do a large and satisfactory trade in this article, which is principally bought from refiners in Greenock, Leith, and London. One of our buyers attends the Greenock Sugar Exchange every morning, which puts us in the very best position for supplying the Sugars produced there.

## TEA.

ONE of our most successful enterprises has been the placing of an experienced buyer on the London Tea Market in conjunction with our English friends. We are thus in a position to offer value that cannot be surpassed by any other house in the trade. Our Teas are all blended in London by one who has made it a life study. Our Packet Teas are also meeting with general favour, and the demand for them is daily increasing.

## COFFEE.

WE keep a varied assortment of French and Oriental Coffee mixtures, which are suited to the tastes of all who prefer to get their coffee mixed with chicory, but we make a specialty of our finest *pure Coffee*, which is made from a mixture of the very finest beans, roasted and ground on our own premises.

## AMERICAN PRODUCE,

SUCH as Cheese, Bacon, Hams, Lard, Flour, and Fruit, are bought from the producers in America by our own buyers there and shipped direct to Glasgow and Leith. We thus escape the commissions charged by middlemen, and our own interests are better looked after than if we were in the hands of agents.

## FLOUR.

WE deal largely in the "Staff of Life," and offer weekly upwards of a hundred different kinds. Perhaps it might be better were societies to agree to a smaller variety. It would enable us to make our large purchases better felt. Our sales for the past twelve months amounted to 218,420 bags, of 280lbs. each.

## DRIED FRUIT.

WE do a very satisfactory trade in Raisins and Currants, and have always on hand an extensive and varied assortment of the different classes of fruit. These are all either imported by ourselves or bought direct from the Liverpool brokers, and we feel certain that no one can offer better value.

## POTATOES.

WE are now doing a very good trade in these. We have three buyers who attend to Potatoes alone, and one is attached to each of the three localities, viz., Kilmarnock, Leith, and Glasgow. They each buy in districts convenient for supplying societies in and around the centres in which they are placed. But we are gradually extending the area of our operations, and expect by-and-by to cover every locality in Scotland that grows good Potatoes.

## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

GROCERY DEPARTMENT, GLASGOW. YEARLY STATEMENT. SALES, EXPENSES, AND NET PROFIT.

| NET SALES.     |                     |              |             |             |                 |                      |               |         |              |           |       |     |             |     | Rate<br>per £<br>of<br>Sales. | Net<br>Profit. | Rate<br>per £<br>of<br>Sales. | Stocks. |
|----------------|---------------------|--------------|-------------|-------------|-----------------|----------------------|---------------|---------|--------------|-----------|-------|-----|-------------|-----|-------------------------------|----------------|-------------------------------|---------|
|                |                     | Dundee.      |             | Kilmarnock. |                 | Grocery,<br>Glasgow. |               | Total.  |              | Expenses. |       |     |             |     |                               |                |                               |         |
|                |                     | £            | s. d.       | £           | s. d.           | £                    | s. d.         | £       | s. d.        | £         | s. d. | d.  | £ s. d.     | d.  |                               |                |                               |         |
| Quarter ending | Dec. 7, 1868..      | ....         | ....        | ....        | ....            | 9,697                | 7 1           | 9,697   | 7 1          | 153       | 5 4   | 3-8 | 48 12 10    | 1-2 | 4,648                         |                |                               |         |
| 52 weeks       | " " 5, 1869..       | ....         | ....        | ....        | ....            | 81,094               | 2 6           | 81,094  | 2 6          | 1,085     | 12 8  | 3-0 | 1,303 15 0  | 3-8 | 5,478                         |                |                               |         |
| 50 "           | " " Nov. 9, 1870..  | ....         | ....        | ....        | ....            | 105,249              | 12 4          | 105,249 | 12 4         | 1,549     | 17 2  | 3-5 | 2,418 9 2   | 5-6 | 9,060                         |                |                               |         |
| 52 "           | " " " 18, 1871..    | ....         | ....        | ....        | ....            | 162,658              | 7 7           | 162,658 | 7 7          | 2,180     | 18 3  | 3-2 | 4,131 8 6   | 6-0 | 14,000                        |                |                               |         |
| 52 "           | " " " 16, 1872..    | ....         | ....        | ....        | ....            | 262,530              | 19 10         | 262,530 | 19 10        | 3,469     | 18 4  | 3-1 | 5,435 3 9   | 4-9 | 21,050                        |                |                               |         |
| 52 "           | " " " 15, 1873..    | ....         | ....        | ....        | ....            | 384,489              | 4 0           | 384,489 | 4 0          | 5,055     | 15 7  | 3-1 | 7,445 19 1  | 4-5 | 24,510                        |                |                               |         |
| 52 "           | " " " 14, 1874..    | ....         | ....        | ....        | ....            | 409,947              | 7 9           | 409,947 | 7 9          | 6,696     | 14 2  | 3-9 | 7,553 5 2   | 4-4 | 24,700                        |                |                               |         |
| 52 "           | " " " 13, 1875..    | ....         | ....        | ....        | ....            | 430,169              | 7 11          | 430,169 | 7 11         | 7,137     | 15 5  | 3-9 | 8,232 11 6  | 4-5 | 29,400                        |                |                               |         |
| 51 "           | " " " 4, 1876..     | 42,952 0 10  | ....        | ....        | ....            | 414,576              | 19 6          | 457,529 | 0 4          | 7,540     | 2 8   | 3-9 | 8,886 2 3   | 4-6 | 39,550                        |                |                               |         |
| 52 "           | " " " 3, 1877..     | 50,654 14 2  | ....        | ....        | ....            | 507,582              | 14 4          | 558,237 | 8 6          | 8,196     | 19 7  | 3-5 | 10,443 15 6 | 4-4 | 39,510                        |                |                               |         |
| 52 "           | " " " 2, 1878..     | 56,480 17 7  | ....        | ....        | ....            | 467,342              | 1 0           | 523,822 | 18 7         | 8,976     | 5 4   | 4-1 | 10,289 0 10 | 4-7 | 40,130                        |                |                               |         |
| 52 "           | " " " 2, 1879..     | 60,046 3 9   | ....        | ....        | ....            | 481,949              | 12 2          | 541,995 | 15 11        | 9,832     | 8 6   | 4-3 | 12,625 11 3 | 5-5 | 50,400                        |                |                               |         |
| 52 "           | " " Oct. 30, 1880.. | 83,856 9 10  | ....        | ....        | ....            | 615,601              | 5 5           | 699,457 | 15 3         | 10,880    | 2 11  | 3-7 | 17,908 0 6  | 6-0 | 43,190                        |                |                               |         |
| 53 "           | " " Nov. 5, 1881..  | 102,157 0 11 | 11,121 15 7 | ....        | ....            | 679,534              | 6 4           | 792,613 | 2 10         | 12,930    | 11 8  | 3-9 | 18,439 1 3  | 5-5 | 63,380                        |                |                               |         |
| 6 months       | " " May 6, 1882..   | 53,190 8 0   | 10,385 14 5 | 12,982 1 4  | ....            | 333,413              | 13 0          | 412,971 | 16 9         | 8,080     | 8 7   | 4-4 | 8,270 16 9  | 4-8 | 61,920                        |                |                               |         |
| 6 "            | " " Nov. 4, 1882..  | ....         | ....        | ....        | ....            | 333,834              | 1 3           | 333,834 | 1 3          | 5,299     | 13 4  | 3-3 | 7,559 19 0  | 4-7 | 34,620                        |                |                               |         |
| 52 weeks       | " " " 3, 1883..     | ....         | ....        | ....        | ....            | 776,681              | 1 5           | 776,681 | 1 5          | 10,940    | 9 4   | 3-3 | 15,350 8 9  | 4-7 | 38,374                        |                |                               |         |
| 52 "           | " " " 1, 1884..     | ....         | ....        | ....        | ....            | 759,443              | 11 7          | 759,443 | 11 7         | 11,152    | 5 4   | 3-5 | 14,231 1 1  | 4-5 | 30,031                        |                |                               |         |
| 52 "           | " " Oct. 31, 1885.. | ....         | ....        | ....        | ....            | 761,889              | 7 11          | 761,889 | 7 11         | 11,831    | 1 0   | 3-7 | 16,137 18 9 | 5-0 | 28,130                        |                |                               |         |
| 60 "           | " " Dec. 25, 1886.. | ....         | ....        | ....        | ....            | 936,030              | 19 0          | 936,030 | 19 0         | 14,431    | 16 4  | 3-7 | 19,073 6 9  | 4-9 | 37,450                        |                |                               |         |
| 6 months       | " " June 25, 1887.. | ....         | ....        | ....        | ....            | 400,378              | 17 0          | 400,378 | 17 0         | 6,137     | 14 5  | 3-7 | 8,922 10 8  | 5-3 | 35,460                        |                |                               |         |
| Totals.....    |                     | 449,337 15 1 | 21,507 10 0 | 12,982 1 4  | 9,367,094 18 11 | 9,850,922 5 4        | 153,659 15 11 | 3-7     | 204,736 18 4 | 4-9       | ..    |     |             |     |                               |                |                               |         |

## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

GROCERY DEPARTMENT, LEITH.—YEARLY STATEMENT, SHOWING SALES, EXPENSES, AND NET PROFIT.

|                                           | Net Sales. |       | Expenses. |       | Rate of Pence per £. |  | Net Profit. |       | Rate of Pence per £. |  | Amount of Stock. |  |
|-------------------------------------------|------------|-------|-----------|-------|----------------------|--|-------------|-------|----------------------|--|------------------|--|
|                                           | £          | s. d. | £         | s. d. | d.                   |  | £           | s. d. | d.                   |  | £                |  |
| Year ending November 3, 1877—52 weeks.... | 30,984     | 0 9   | 451       | 17 0  | 3·5                  |  | 481         | 12 9  | 3·7                  |  | 4,590            |  |
| " " 2, 1878 " " .....                     | 76,767     | 11 1  | 1,119     | 10 4  | 3·5                  |  | 1,679       | 0 11  | 5·2                  |  | 3,000            |  |
| " " 1, 1879 " " .....                     | 88,101     | 15 11 | 1,234     | 16 8  | 3·5                  |  | 2,363       | 8 3   | 6·4                  |  | 6,480            |  |
| " " October 30, 1880 " " .....            | 145,764    | 0 3   | 2,140     | 6 2   | 3·5                  |  | 3,777       | 4 2   | 6·2                  |  | 8,410            |  |
| " " November 5, 1881—53 " .....           | 193,833    | 10 10 | 2,826     | 11 8  | 3·5                  |  | 5,542       | 7 9   | 6·8                  |  | 13,400           |  |
| " " 4, 1882—52 " " .....                  | 205,728    | 16 3  | 2,927     | 11 2  | 3·4                  |  | 4,895       | 11 9  | 5·7                  |  | 14,890           |  |
| " " 3, 1883 " " .....                     | 255,160    | 2 2   | 3,488     | 17 9  | 3·2                  |  | 6,093       | 19 3  | 5·7                  |  | 20,045           |  |
| " " 1, 1884 " " .....                     | 281,509    | 2 4   | 3,992     | 8 2   | 3·4                  |  | 6,935       | 10 4  | 5·9                  |  | 16,250           |  |
| " " October 31, 1885 " " .....            | 363,664    | 7 11  | 5,031     | 1 8   | 3·3                  |  | 10,572      | 0 8   | 6·9                  |  | 29,750           |  |
| " " December 25, 1886—60 " .....          | 496,240    | 13 8  | 7,160     | 19 5  | 3·4                  |  | 12,452      | 11 4  | 6·0                  |  | 24,000           |  |
| 26 weeks ending June 25, 1887 .....       | 225,700    | 3 10  | 3,249     | 0 8   | 3·4                  |  | 6,312       | 11 2  | 6·7                  |  | 32,595           |  |
| Totals to June 25, 1887.....              | 2,363,454  | 5 0   | 33,673    | 0 8   | 3·4                  |  | 61,105      | 18 4  | 6·2                  |  | 32,595           |  |



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

QUARTERLY STATEMENT, GROCERY DEPARTMENT, KILMARNOCK, FROM DATE OF KEEPING A SEPARATE ACCOUNT.

|                               | Net Sales. |       | Expenses. |       | Rate per £ of Sales. |       | Net Profit. |       | Rate per £ of Sales. |   | Stocks. |
|-------------------------------|------------|-------|-----------|-------|----------------------|-------|-------------|-------|----------------------|---|---------|
|                               | £          | s. d. | £         | s. d. | d.                   | s. d. | £           | s. d. | d.                   | £ |         |
| Quarter ending August 5, 1882 | 6,594      | 0 5   | 190       | 15 1  | 7-0                  | 190   | 7 8         | 6-0   | 535                  |   |         |
| " " November 4, 1882          | 8,849      | 10 3  | 221       | 7 8   | 6-0                  | 137   | 9 1         | 3-7   | 1,550                |   |         |
| " " February 3, 1883          | 9,894      | 13 1  | 245       | 18 11 | 5-9                  | 362   | 11 7        | 8-7   | 2,320                |   |         |
| " " May 5, 1883               | 10,192     | 13 4  | 236       | 7 10  | 5-5                  | 472   | 3 0         | 11-1  | 2,120                |   |         |
| " " August 4, 1883            | 7,979      | 7 10  | 245       | 14 8  | 7-3                  | 238   | 4 11        | 7-1   | 720                  |   |         |
| " " November 3, 1883          | 11,625     | 19 8  | 225       | 0 1   | 4-6                  | 176   | 13 6        | 3-6   | 1,663                |   |         |
| " " February 2, 1884          | 8,446      | 16 2  | 217       | 1 5   | 6-1                  | 123   | 10 4        | 3-5   | 2,898                |   |         |
| " " May 3, 1884               | 9,492      | 2 9   | 197       | 12 5  | 4-9                  | 162   | 2 9         | 4-0   | 1,781                |   |         |
| " " August 2, 1884            | 9,145      | 12 11 | 208       | 15 8  | 5-4                  | 114   | 15 5        | 3-0   | 963                  |   |         |
| " " November 1, 1884          | 12,989     | 5 11  | 198       | 7 11  | 3-7                  | 235   | 6 3         | 4-2   | 2,812                |   |         |
| " " January 31, 1885          | 10,094     | 9 8   | 204       | 18 3  | 4-8                  | 69    | 14 9        | 1-6   | 2,521                |   |         |
| " " May 2, 1885               | 8,874      | 3 9   | 159       | 14 3  | 4-3                  | 258   | 5 9         | 6-9   | 1,750                |   |         |
| " " August 1, 1885            | 8,644      | 2 7   | 192       | 11 6  | 5-3                  | 102   | 4 1         | 2-8   | 1,132                |   |         |
| " " October 31, 1885          | 14,012     | 17 7  | 208       | 14 3  | 3-5                  | 534   | 12 2        | 9-1   | 2,300                |   |         |
| " " January 30, 1886          | 9,461      | 10 4  | 204       | 13 0  | 5-2                  | 295   | 13 5        | 7-5   | 2,010                |   |         |
| " " May 1, 1886               | 9,439      | 14 11 | 177       | 13 5  | 4-5                  | 289   | 7 4         | 7-3   | 1,600                |   |         |
| " " July 31, 1886             | 9,434      | 7 4   | 193       | 15 8  | 4-9                  | 264   | 10 0        | 6-7   | 760                  |   |         |
| " " *December 25, 1886        | 23,129     | 5 10  | 309       | 3 2   | 3-2                  | 908   | 16 9        | 9-4   | 2,070                |   |         |
| " " March 26, 1887            | 11,129     | 13 7  | 170       | 3 9   | 3-6                  | 334   | 3 8         | 7 8   | 2,615                |   |         |
| " " June 25, 1887             | 9,923      | 13 5  | 189       | 4 9   | 4-5                  | 255   | 7 8         | 6-1   | 1,525                |   |         |
| Totals .....                  | 209,359    | 1 4   | 4,197     | 13 8  | 4 8                  | 5,529 | 0 1         | 6-3   | ....                 |   |         |

\* Twenty-one weeks.

## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

QUARTERLY STATEMENT, GROCERY DEPARTMENT, DUNDEE, FROM DATE OF KEEPING A SEPARATE ACCOUNT.

| Quarter Ending           | Net Sales. |       | Expenses. |       | Rate per £ of Sales. |       | Net Profit. |       | Rate per £ of Sales. |    | Net Loss. |       | Rate per £ of Sales. |    | Stocks. |
|--------------------------|------------|-------|-----------|-------|----------------------|-------|-------------|-------|----------------------|----|-----------|-------|----------------------|----|---------|
|                          | £          | s. d. | £         | s. d. | d.                   | s.    | £           | s. d. | d.                   | s. | £         | s. d. | d.                   | s. | £       |
| August 5, 1882.....      | 6,328      | 4 0   | 237       | 2 11  | 8-8                  | ....  | ....        | ....  | ..                   | .. | 126       | 19 9  | 4-8                  | .. | 1,205   |
| November 4, 1882.....    | 7,180      | 12 3  | 207       | 17 9  | 7-0                  | ....  | ....        | ....  | ..                   | .. | 98        | 12 7  | 3-3                  | .. | 1,474   |
| February 3, 1883.....    | 8,513      | 10 1  | 217       | 6 4   | 6-1                  | 67    | 12 4        | 4     | 1-8                  | .. | ....      | ....  | ..                   | .. | 1,040   |
| May 5, 1883.....         | 8,583      | 16 3  | 226       | 13 4  | 6-3                  | 96    | 1 7         | 7     | 2-7                  | .. | ....      | ....  | ..                   | .. | 1,080   |
| August 4, 1883.....      | 9,050      | 6 4   | 245       | 1 3   | 6-5                  | 5     | 15 3        | 3     | 0-1                  | .. | ....      | ....  | ..                   | .. | 1,923   |
| November 3, 1883.....    | 8,533      | 5 8   | 218       | 11 2  | 6-1                  | 71    | 2 5         | 5     | 2-0                  | .. | ....      | ....  | ..                   | .. | 2,455   |
| February 2, 1884.....    | 9,278      | 1 10  | 235       | 12 9  | 6-1                  | 88    | 14 11       | 11    | 2-2                  | .. | ....      | ....  | ..                   | .. | 2,250   |
| May 3, 1884.....         | 10,943     | 14 6  | 252       | 16 9  | 5-6                  | 181   | 7 10        | 10    | 4-0                  | .. | ....      | ....  | ..                   | .. | 1,975   |
| August 2, 1884.....      | 12,648     | 2 11  | 262       | 11 10 | 5-0                  | 260   | 9 7         | 7     | 4-9                  | .. | ....      | ....  | ..                   | .. | 2,950   |
| November 1, 1884.....    | 13,776     | 3 6   | 275       | 12 6  | 4-8                  | 73    | 16 8        | 8     | 1-3                  | .. | ....      | ....  | ..                   | .. | 2,690   |
| January 31, 1885.....    | 12,080     | 7 2   | 291       | 8 8   | 5-8                  | 111   | 1 3         | 3     | 2-2                  | .. | ....      | ....  | ..                   | .. | 1,080   |
| May 2, 1885.....         | 13,424     | 7 0   | 242       | 12 6  | 4-3                  | 189   | 3 2         | 2     | 3-4                  | .. | ....      | ....  | ..                   | .. | 1,950   |
| August 1, 1885.....      | 14,930     | 3 3   | 251       | 12 1  | 4-0                  | 359   | 16 4        | 4     | 5-8                  | .. | ....      | ....  | ..                   | .. | 2,940   |
| October 31, 1885.....    | 15,685     | 3 4   | 271       | 7 11  | 4-2                  | 348   | 15 2        | 2     | 5-3                  | .. | ....      | ....  | ..                   | .. | 2,890   |
| January 30, 1886.....    | 12,248     | 16 9  | 248       | 12 8  | 4-8                  | 238   | 13 5        | 5     | 4-0                  | .. | ....      | ....  | ..                   | .. | 1,300   |
| May 1, 1886.....         | 13,616     | 12 9  | 283       | 8 7   | 5-0                  | 86    | 11 2        | 2     | 1-5                  | .. | ....      | ....  | ..                   | .. | 2,670   |
| July 31, 1886.....       | 14,912     | 1 10  | 265       | 7 11  | 4-2                  | 205   | 17 7        | 7     | 3-3                  | .. | ....      | ....  | ..                   | .. | 3,250   |
| * December 25, 1886..... | 22,975     | 17 8  | 397       | 17 9  | 4-1                  | 348   | 8 3         | 3     | 3-7                  | .. | ....      | ....  | ..                   | .. | 2,000   |
| March 26, 1887.....      | 13,916     | 4 6   | 244       | 6 5   | 4-2                  | 163   | 5 0         | 0     | 2-8                  | .. | ....      | ....  | ..                   | .. | 1,885   |
| June 25, 1887.....       | 13,810     | 2 11  | 241       | 9 2   | 4-2                  | 210   | 10 3        | 3     | 3-5                  | .. | ....      | ....  | ..                   | .. | 3,050   |
| Totals.....              | 242,435    | 14 6  | 5,117     | 10 3  | 5-0                  | 3,107 | 2 2         | 2     | ..                   | .. | 225       | 12 4  | ..                   | .. | ..      |
|                          |            |       |           |       |                      | 225   | 12 4        | 4     | ..                   | .. |           |       |                      |    |         |
|                          |            |       |           |       |                      | 2,881 | 9 10        | 10    |                      |    |           |       |                      |    |         |

\* Twenty-one weeks.



# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## D R A P E R Y   B R A N C H .

THE Scottish Co-operative Wholesale Society had not been long established, its benefits felt, and its success ensured in the Grocery and Provision Trades, ere requests were made that it should also undertake the supply of Drapery Goods. Effect was given in 1873 to these requests by its being then decided to open a Drapery Branch as a separate part of the business. A buyer was duly engaged, and on December 28th of that year a beginning was made.

The commencement was a modest one, being confined to the supplying of plain goods in every-day demand. Goods in which there was an element of risk were for the time being avoided, until the requirements of societies were understood, and the extent of their wants known. The wisdom of that policy has been proved, for the branch has gradually, but surely and safely, developed, and to-day all articles in the Drapery Trade, whether for personal wear and adornment or for the household, are kept in stock.

Supplies are drawn direct from the different manufacturing centres at home and abroad, reputed best for the "thousand and one" articles that are sold. The Drapery Branch has been the parent of the Boot and Shoe, and Furniture Branches, which were embodied in it until their expansion necessitated their being established as distinct branches of the business. While the two branches named have been separated from the Drapery, it yet gives employment to one-third of the total number of hands employed by the Wholesale. The claims of the Drapery Branch for a more than passing notice in the "Annual" will, we think, be admitted, not only from what it has done, and is doing, but from the possibilities that are in that trade for future development.

It offers the best field for the expansion of co-operative production, and the employment of co-operative capital, having within itself a market for the goods that it may from time to time be thought advisable to manufacture. We have examples of this in the Clothing, Shirt, and Knitting Factories already in operation. The further establishment of factories for other goods sold should only be a question of time.

We often think that the extent of the Drapery Branch and its resources are not so well known to co-operators as they should be, therefore a list of Departments into which it is sub-divided will not be out of place. The Departments are—

CLOTHS AND TWEEDS.

BOYS' AND YOUTHS' READY-MADE CLOTHING.

BESPOKE CLOTHING AND WATERPROOF GOODS.

MEN'S AND BOYS' SHIRTS, FRONTS, AND COLLARS.

BRITISH AND FRENCH DRESS GOODS OF ALL SORTS, FRENCH MERINOES AND CASHMERES, SILKS AND VELVETEENS.



LADIES' JACKETS AND MANTLES, AND JACKET AND MANTLE CLOTHS.

SHIRTINGS, SKIRTINGS, TARTANS, AND SHAWLS.

FLANNELS, BLANKETS, AND BED COVERS.

GREY AND BLEACHED COTTONS, COTTON SHEETINGS, MOLESKINS AND CORDS.

SCOTCH AND IRISH LINENS, MANCHESTER LININGS, LACE CURTAINS,  
EMBROIDERED AND TAPESTRY TABLE COVERS, AND BLINDINGS.

DRESS AND FURNITURE PRINTS, CRETONNES, COTTON DRESS MATERIALS, AND  
COTTON SHIRTINGS.

HATS AND CAPS.

UMBRELLAS, STAYS, SCARFS, AND FURS.

ALLOA AND FINGERING YARNS.

LAMB'S WOOL, CASHMERE, AND COTTON HOSIERY.

KID AND FABRIC GLOVES, FANCY HOSIERY, CARDIGAN AND CASHMERE JACKETS.

CHILDREN'S AND MISSES' COSTUMES, PINAFORES AND APRONS, LADIES' AND  
CHILDREN'S UNDERCLOTHING.

LADIES' AND CHILDREN'S STRAW, FELT, AND OTHER HATS, UNTRIMMED ;  
RIBBONS, FLOWERS, AND FEATHERS.

LADIES' AND CHILDREN'S TRIMMED MILLINERY.

TRIMMING LACES AND LACE GOODS, LADIES' COLLARS AND CUFFS, FRILLINGS,  
SCARFS, &c.

DRESS TRIMMINGS, HABERDASHERY, AND SMALLWARES.

The outline given of the twenty-one Departments is necessarily of the briefest description, but we think it furnishes evidence of capacity to supply all the requirements in the Drapery Trade of the co-operative movement.

Joint buying with the English Wholesale is in operation in the Drapery Branch as in the Grocery. Our position as cash buyers, and the extent of our purchases, immediately secures for us the best terms from manufacturers. It should be obvious to all societies that we are in a position to supply their wants, and on as good terms as any house in the trade. A very few societies have not yet seen their way to do much of their trade in this branch; why this should be is beyond our comprehension. It is an indisputable fact that societies have been, as a rule, successful in proportion to their constancy to the Wholesale, and in the Drapery Trade it has been so to such a degree as to make this very marked.

We would suggest to those societies who are still buying past us that they calmly consider the matter, and ask themselves if it is fair to the other societies in the federation that they should withhold their trade, and leave the business to be carried on by these other members. We suggest that this matter receive the attention of all societies whom it may concern; it is needful that they should justify their position. A conference between them and the Wholesale is, to our minds, the best means of considering and deciding this question, and we feel certain that from a meeting for such a purpose the best results would follow. So long as they believe that they are compelled to buy past the Wholesale, so long must they feel that a loss is being forced upon them, because the Wholesale cannot, to their mind, be fulfilling its functions properly; therefore, to the extent that they buy from other parties, to that extent are they losing the profit that should be theirs from successful trading. We hope this question will be faced by all concerned until such a thing as societies buying from other warehousemen what they ought to get from us will be unknown.

## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

QUARTERLY STATEMENT, DRAPERY DEPARTMENT, FROM DATE OF KEEPING A SEPARATE ACCOUNT.

| Quarters Ending      | NET SALES. |       |            |       |          |       |         |       |        |       | Expenses,<br>£ s. d. | Rate<br>per<br>£ of<br>Sales. | Net<br>Profit,<br>£ s. d. | Rate<br>per<br>£ of<br>Sales. | Stocks.<br>£ |
|----------------------|------------|-------|------------|-------|----------|-------|---------|-------|--------|-------|----------------------|-------------------------------|---------------------------|-------------------------------|--------------|
|                      | Boots.     |       | Furniture. |       | Drapery. |       | Total.  |       |        |       |                      |                               |                           |                               |              |
|                      | £          | s. d. | £          | s. d. | £        | s. d. | £       | s. d. |        |       |                      |                               |                           |                               |              |
| August 5, 1882..     | 8,351      | 15 0  | 2,693      | 6 11  | 21,144   | 6 11  | 32,189  | 8 10  | 1,123  | 9 9   | d.                   | 8-4                           | 1,171                     | 8 2                           | 28,560       |
| November 4, 1882..   | 9,267      | 11 10 | 2,057      | 1 11  | 25,587   | 12 9  | 36,912  | 6 6   | 1,356  | 1 2   | d.                   | 8 8                           | 1,308                     | 6 6                           | 34,030       |
| February 3, 1883..   | 7,520      | 4 4   | 2,280      | 17 3  | 22,301   | 14 3  | 32,102  | 15 10 | 1,409  | 11 3  | d.                   | 10-5                          | 967                       | 14 0                          | 33,260       |
| May 5, 1883..        | 8,159      | 0 7   | 1,904      | 14 4  | 25,682   | 6 9   | 35,746  | 1 8   | 1,438  | 12 11 | d.                   | 9-6                           | 1,090                     | 8 2                           | 31,231       |
| August 4, 1883..     | 9,368      | 12 4  | 3,045      | 1 9   | 23,937   | 10 11 | 36,351  | 5 0   | 1,447  | 8 1   | d.                   | 9-5                           | 1,284                     | 12 4                          | 31,253       |
| November 3, 1883..   | 9,658      | 4 3   | 2,518      | 11 10 | 30,562   | 12 8  | 42,739  | 8 9   | 1,534  | 9 3   | d.                   | 8 6                           | 1,807                     | 4 8                           | 32,281       |
| February 2, 1884..   | 8,944      | 16 1  | 2,994      | 17 9  | 26,445   | 3 8   | 38,384  | 17 6  | 1,588  | 18 8  | d.                   | 9-9                           | 1,605                     | 11 5                          | 33,192       |
| May 3, 1884..        | 9,782      | 13 2  | 2,307      | 11 1  | 30,463   | 14 9  | 42,553  | 19 0  | 1,666  | 5 8   | d.                   | 9-4                           | 1,591                     | 16 7                          | 36,065       |
| August 2, 1884..     | 10,981     | 0 10  | 4,595      | 4 10  | 28,337   | 2 6   | 43,913  | 8 2   | 1,731  | 9 9   | d.                   | 9-1                           | 1,717                     | 4 10                          | 35,784       |
| November 1, 1884..   | 10,884     | 13 3  | 2,887      | 1 9   | 34,034   | 16 0  | 47,806  | 11 0  | 1,827  | 15 5  | d.                   | 9-1                           | 1,899                     | 14 5                          | 39,661       |
| January 31, 1885..   | ....       | ....  | ....       | ....  | 30,267   | 3 3   | 30,267  | 3 3   | 1,290  | 0 9   | d.                   | 10-2                          | 1,319                     | 11 1                          | 31,084       |
| May 2, 1885..        | ....       | ....  | ....       | ....  | 37,153   | 15 9  | 37,153  | 15 9  | 1,414  | 15 11 | d.                   | 9-1                           | 1,492                     | 17 7                          | 32,340       |
| August 1, 1885..     | ....       | ....  | ....       | ....  | 33,578   | 12 7  | 33,578  | 12 7  | 1,438  | 19 0  | d.                   | 10-2                          | 1,211                     | 0 11                          | 31,020       |
| October 31, 1885..   | ....       | ....  | ....       | ....  | 39,994   | 14 4  | 39,994  | 14 4  | 1,547  | 6 10  | d.                   | 9-2                           | 1,847                     | 0 5                           | 35,990       |
| January 30, 1886..   | ....       | ....  | ....       | ....  | 33,029   | 17 3  | 33,029  | 17 3  | 1,554  | 9 2   | d.                   | 11-2                          | 1,216                     | 7 10                          | 33,150       |
| May 1, 1886..        | ....       | ....  | ....       | ....  | 44,570   | 7 11  | 44,570  | 17 11 | 1,641  | 9 6   | d.                   | 8 8                           | 1,709                     | 19 3                          | 36,340       |
| July 31, 1886..      | ....       | ....  | ....       | ....  | 42,129   | 5 5   | 42,129  | 5 5   | 1,705  | 8 3   | d.                   | 9-7                           | 1,801                     | 11 5                          | 40,100       |
| *December 25, 1886.. | ....       | ....  | ....       | ....  | 75,835   | 10 10 | 75,835  | 10 10 | 3,362  | 6 4   | d.                   | 10-6                          | 3,983                     | 5 11                          | 45,740       |
| March 26, 1887..     | ....       | ....  | ....       | ....  | 40,647   | 13 5  | 40,647  | 13 5  | 2,028  | 12 8  | d.                   | 11-9                          | 1,248                     | 2 8                           | 47,670       |
| June 25, 1887..      | ....       | ....  | ....       | ....  | 50,432   | 4 9   | 50,432  | 4 9   | 2,081  | 15 1  | d.                   | 9-9                           | 2,185                     | 17 1                          | 42,170       |
| Totals .....         | 92,918     | 11 8  | 27,284     | 9 5   | 696,136  | 16 8  | 816,339 | 17 9  | 33,189 | 5 5   | d.                   | 9-7                           | 32,459                    | 15 3                          | ....         |

\* Twenty-one weeks.



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

PRODUCTIVE DEPARTMENTS.—QUARTERLY STATEMENT SHOWING EXPENSES AND NET PROFIT.

## TAILORING FACTORY.

|                            |       | Production. |       | Expenses. |       | Rate per Cent. | Net Profit. |       | Rate per Cent. | Net Loss. |       | Rate per Cent. |
|----------------------------|-------|-------------|-------|-----------|-------|----------------|-------------|-------|----------------|-----------|-------|----------------|
|                            |       | £           | s. d. | £         | s. d. |                | £           | s. d. |                | £         | s. d. |                |
| November 4, 1882           | ..... | 427         | 10 10 | 319       | 12 11 | 74·71          | 1           | 11 2  | 0·23           | ..        | ..    | ..             |
| February 3, 1883           | ..... | 542         | 7 3   | 386       | 2 6   | 71·21          | 34          | 9 10  | 6·27           | ..        | ..    | ..             |
| May 5, 1883                | ..... | 541         | 8 10  | 404       | 5 6   | 74·67          | ..          | ..    | ..             | 15        | 9 5   | 2·77           |
| August 4, 1883             | ..... | 647         | 18 2  | 484       | 17 7  | 74·80          | ..          | ..    | ..             | 7         | 2 10  | 1·08           |
| November 3, 1883           | ..... | 537         | 13 10 | 357       | 13 9  | 66·48          | ..          | ..    | ..             | 0         | 8 2   | ..             |
| February 2, 1884           | ..... | 464         | 3 0   | 304       | 3 7   | 65·51          | 13          | 14 9  | 2·80           | ..        | ..    | ..             |
| May 1, 1884                | ..... | 587         | 6 0   | 435       | 16 7  | 74·11          | ..          | ..    | ..             | 1         | 16 4  | 0·2            |
| August 2, 1884             | ..... | 631         | 8 0   | 463       | 8 0   | 73·37          | 15          | 1 0   | 2·37           | ..        | ..    | ..             |
| November 1, 1884           | ..... | 838         | 10 10 | 450       | 5 9   | 53·70          | 18          | 9 9   | 2·14           | ..        | ..    | ..             |
| January 31, 1885           | ..... | 661         | 1 6   | 426       | 4 10  | 64·45          | ..          | ..    | ..             | 38        | 15 8  | 5·74           |
| May 2, 1885                | ..... | 838         | 8 3   | 491       | 7 3   | 58·59          | 54          | 17 5  | 6·44           | ..        | ..    | ..             |
| August 1, 1885             | ..... | 947         | 8 5   | 569       | 11 6  | 60·08          | 58          | 3 2   | 6·12           | ..        | ..    | ..             |
| October 31, 1885           | ..... | 1,164       | 13 7  | 692       | 2 0   | 59·45          | 5           | 19 5  | 0·51           | ..        | ..    | ..             |
| January 30, 1886           | ..... | 1,128       | 2 7   | 742       | 7 1   | 65·78          | ..          | ..    | ..             | 4         | 1 11  | 0·35           |
| May 1, 1886                | ..... | 1,474       | 0 7   | 814       | 6 1   | 55·22          | 38          | 14 11 | 2·57           | ..        | ..    | ..             |
| July 31, 1886              | ..... | 1,511       | 2 1   | 869       | 4 8   | 57·51          | 15          | 13 10 | 0·99           | ..        | ..    | ..             |
| *December 25, 1886         | ..... | 2,139       | 13 9  | 1,420     | 12 6  | 66·38          | ..          | ..    | ..             | 36        | 17 2  | 1·68           |
| March 26, 1887             | ..... | 1,587       | 2 3   | 926       | 18 10 | 58·34          | 21          | 3 11  | 1·32           | ..        | ..    | ..             |
| June 25, 1887              | ..... | 2,265       | 11 8  | 1,351     | 1 8   | 59·64          | 111         | 17 4  | 4·90           | ..        | ..    | ..             |
| Totals to June 25, 1887 .. |       | 18,935      | 11 0  | 11,910    | 2 7   | 62·89          | 389         | 16 6  | ..             | 104       | 11 6  | ..             |
|                            |       |             |       |           |       |                | 104         | 11 6  | ..             |           |       |                |
|                            |       |             |       |           |       |                | 285         | 5 0   | 1·5            |           |       |                |

\* Twenty-one weeks.



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## PRODUCTIVE DEPARTMENTS—QUARTERLY STATEMENT.

## SHIRT FACTORY.

|                            | Production. | Expenses.  | Rate<br>per<br>Cent. | Net Profit. | Rate<br>per<br>Cent. | Net Loss. | Rate<br>per<br>Cent. |
|----------------------------|-------------|------------|----------------------|-------------|----------------------|-----------|----------------------|
|                            | £ s. d.     | £ s. d.    |                      | £ s. d.     |                      | £ s. d.   |                      |
| November 4, 1882           | 201 11 0    | 159 13 10  | 79·10                | 21 9 4      | 10·44                | ..        | ..                   |
| February 3, 1883           | 207 9 10    | 176 16 1   | 85·02                | 8 5 6       | 3·86                 | ..        | ..                   |
| May 5, 1883                | 208 8 0     | 171 5 8    | 82·21                | 5 7 8       | 2·40                 | ..        | ..                   |
| August 4, 1883             | 168 1 11    | 147 14 11  | 87·5                 | 7 16 9      | 4·76                 | ..        | ..                   |
| November 3, 1883           | 175 13 4    | 159 3 1    | 90·85                | 0 9 3       | ..                   | ..        | ..                   |
| February 2, 1884           | 225 16 1    | 188 4 5    | 83·55                | 9 18 8      | 4·44                 | ..        | ..                   |
| May 3, 1884                | 234 2 3     | 193 8 0    | 82·47                | 7 16 10     | 2·99                 | ..        | ..                   |
| August 2, 1884             | 178 18 8    | 161 13 5   | 90·44                | ..          | ..                   | 8 16 10   | 4·91                 |
| November 1, 1884           | 231 2 7     | 200 15 11  | 86·57                | ..          | ..                   | 7 9 9     | 3·22                 |
| January 31, 1885           | 294 9 10    | 244 0 8    | 83·02                | 13 1 3      | 4·42                 | ..        | ..                   |
| May 2, 1885                | 474 7 1     | 256 1 5    | 54·00                | 37 16 7     | 7·80                 | ..        | ..                   |
| August 1, 1885             | 303 19 5    | 182 7 11   | 60·06                | 23 18 5     | 7·78                 | ..        | ..                   |
| October 31, 1885           | 334 11 4    | 202 10 8   | 60·47                | 14 9 3      | 4·19                 | ..        | ..                   |
| January 30, 1886           | 355 4 8     | 216 10 6   | 60·84                | 10 18 9     | 3·09                 | ..        | ..                   |
| May 1, 1886                | 409 10 4    | 245 3 7    | 59·9                 | 14 10 1     | 3·42                 | ..        | ..                   |
| July 31, 1886              | 422 4 4     | 252 13 2   | 59·71                | 26 7 6      | 6·16                 | ..        | ..                   |
| December 25, 1886          | 705 17 7    | 418 5 3    | 59·29                | 20 7 0      | 2·83                 | ..        | ..                   |
| March 26, 1887             | 391 17 6    | 248 3 1    | 63·26                | 8 10 8      | 2·04                 | ..        | ..                   |
| June 25, 1887              | 400 7 4     | 235 18 8   | 59·00                | 8 8 3       | 2·00                 | ..        | ..                   |
| Totals to June 25, 1887 .. | 5,923 13 1  | 4,060 10 3 | 68·54                | 239 11 9    | ..                   | 16 6 7    | ..                   |
|                            |             |            | ..                   | 16 6 7      | ..                   |           |                      |
|                            |             |            |                      | 223 5 2     | 3·76                 |           |                      |

# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

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## BOOT AND SHOE FACTORY.

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AMID the general increase of trade registered in the several departments of the Scottish Co-operative Wholesale Society for the year 1887, it is highly satisfactory to us to be able to announce that the Boot and Shoe Factory still leads with a rapid and steadily progressive advance.

Opening with a weekly average of 1,500 pairs, we have gone up to a weekly average of 3,000 pairs; or, to put it in another way, we have exactly doubled our weekly output. But to understand the full significance of this increase in the volume of the trade done, it is necessary to bear in mind that the average price per pair of boots has been fully maintained; in other words, an equal proportion of this increase has been secured all over, thereby preventing a decrease in the price per pair, which would have resulted from an increased consumption of low-class goods only.

In this connection it is important to note that during the two past years the production of the Boot Factory was wholly confined to men's and boys' wear; but the almost universal recognition of the superior quality of these goods, the marked preference of members of societies for the same, and a widely-expressed desire on the part of societies that the operations of the Factory should be extended so as to embrace other classes of goods, induced us early in the year to undertake the manufacture of Ladies' Goods; and the marked success of this new departure is conclusive that we rightly interpreted the general desire. Already the output for ladies' wear has reached the handsome figure of 1,000 pairs per week—one-third of the total produced—an extraordinary development of trade in less than one year, alike creditable to the management and to the societies, and no doubt largely due to the policy upon which the works were started and upon which they are strictly conducted, viz., to manufacture only the best material—sound, honest, and reliable—and to pay the highest wages, thereby securing skilful and honest labour. The ever extending trade shows how heartily the societies endorsed and supported this policy.

Under this policy we have secured a position which enables us to produce for societies what we could not possibly purchase for them—Boots and Shoes—which we can confidently certify to be, both as regards material and workmanship, an honest article, really and truly worth the money.



To establish and fully mature this confidence between societies and ourselves has all along been our steady and our principal aim, because we are convinced that this exchange of real confidence and honest service is essential to secure the benefit of federated production.

To illustrate this more fully, let us take a pair of boots made-up to sell at seven shillings, and, say a society is offered the same boot at six shillings and sixpence—no doubt a very tempting reduction. Now, if the committee of the society takes an intelligent view of the situation they will send the cheaper boot to their own Factory, asking why a similar boot cannot be produced at the same price. To meet this demand what is necessary? The essential condition being that the general appearance of the cheaper boot must be equal to that of the dearer, therefore it is obvious that the value of the material must be reduced; for this reason, that the reduction asked is largely in excess of the actual profit, and to sell the seven-shilling boot at the lower figure would result in an actual loss.

In the practical working of the Factory, every separate piece of leather, every separate piece of work, is exactly calculated to yield the necessary profit. It will surprise many to know that a boot is made up of upwards of thirty pieces of leather, varying from one halfpenny to two shillings, and the manufacture is detailed in a similar manner. To meet the required reduction, the value of the material must be reduced sixpence, and the resulting boot may have the same appearance, but will it wear the same? The lesson is obvious. At your Factory you can have boots made, equal in value, at the same price as they can be made elsewhere, but neither in your own Factory nor elsewhere can or will you be supplied with a seven-shilling boot for six shillings and sixpence.

There is, however, a point beyond which it would be to the interest of neither the Factory nor of the Retail Store to lower the price of the material, for the best boot is always the cheapest in the long run.

Many societies at present anticipate (by six weeks or two months) their demands, and place their orders with the Factory, thus enabling us to make and hold in stock a supply large enough to meet the requirements of a growing trade. There is no need for the order being definite, only a general statement of the likely quantity required of this or that boot. Again, a large number of societies only order once a week, thereby effecting a considerable saving in the cost of carriage. These are trifles, but the excellence of all business arrangements is largely made up of trifles.

Order Books are supplied from the Factory, free of charge, which will be found very useful to societies, more especially when they arrange to order once a week.

In conclusion, societies must keep in mind the fact that a large amount of capital is sunk in plant and stock, and the oncost upon the work turned out must be paid all the same, whether fully employed or not, as it must be equal to meet the emergency of an extra output; hence, by enabling the Factory to manufacture in advance, the expense of plant and oncost are reduced to the minimum. It will, therefore, be evident that even in their own interest it is their duty to assist us in perfecting all our working arrangements, so that we can supply their orders on the shortest possible notice, relying with the utmost confidence upon the quality of the material and workmanship supplied, we, in our turn, doing our utmost to prove that their confidence has not been misplaced.



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## PRODUCTIVE DEPARTMENTS.—QUARTERLY STATEMENT SHOWING EXPENSES AND NET PROFIT.

## BOOT AND SHOE FACTORY.

|                            | Production. | Expenses.   | Rate per Cent. | Net Profit. | Rate per Cent. | Net Loss. | Rate per Cent. |
|----------------------------|-------------|-------------|----------------|-------------|----------------|-----------|----------------|
|                            | £ s. d.     | £ s. d.     |                | £ s. d.     |                | £ s. d.   |                |
| May 2, 1885 .....          | 3,298 16 7  | 1,183 10 5  | 35·87          | ..          | ..             | 47 9 10   | 1·42           |
| August 1, 1885 .....       | 5,222 6 4   | 1,642 8 2   | 31·44          | 65 14 11    | 1·24           | ..        | ..             |
| October 31, 1885 .....     | 5,283 9 3   | 1,686 10 3  | 31·91          | 175 4 4     | 3·31           | ..        | ..             |
| January 30, 1886 .....     | 5,456 19 0  | 1,723 7 0   | 31·57          | 81 8 8      | 1·48           | ..        | ..             |
| May 1, 1886 .....          | 6,535 2 5   | 2,010 0 5   | 30·75          | 165 13 2    | 2·52           | ..        | ..             |
| July 31, 1886 .....        | 6,217 1 1   | 2,101 11 6  | 33·77          | 215 3 5     | 3·45           | ..        | ..             |
| *December 25, 1886 .....   | 15,607 4 2  | 4,290 7 0   | 27·49          | 651 19 9    | 4·17           | ..        | ..             |
| March 26, 1887 .....       | 6,105 16 5  | 2,161 8 4   | 35·39          | 60 12 7     | 0·98           | ..        | ..             |
| June 25, 1887 .....        | 8,757 13 0  | 2,796 10 5  | 31·92          | 63 15 4     | 0·72           | ..        | ..             |
| Totals to June 25, 1887 .. | 62,484 8 3  | 19,565 13 6 | 31·36          | 1,479 12 2  | ..             | 47 9 10   | ..             |
|                            |             |             |                | 47 9 10     | ..             |           |                |
|                            |             |             |                | 1,432 2 4   | 2·29           |           |                |

\* Twenty-one weeks.

## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

QUARTERLY STATEMENT, BOOT AND SHOE DEPARTMENT, FROM DATE OF KEEPING A SEPARATE ACCOUNT.

|                                   | Net Sales. |       | Expenses. |       | Rate of<br>Pence per £<br>of Sales. | Net Profit. |       | Rate of<br>Pence per £<br>of Sales. | Stocks. |
|-----------------------------------|------------|-------|-----------|-------|-------------------------------------|-------------|-------|-------------------------------------|---------|
|                                   | £          | s. d. | £         | s. d. |                                     | £           | s. d. |                                     | £       |
| Quarter ending January 31, 1885.. | 10,188     | 11 5  | 290       | 18 9  | 6·8                                 | 596         | 3 8   | 14·0                                | 5,990   |
| " " May 2, 1885..                 | 12,549     | 19 5  | 353       | 2 4   | 6·7                                 | 608         | 18 9  | 11·6                                | 5,530   |
| " " August 1, 1885..              | 16,185     | 10 11 | 429       | 16 10 | 6·4                                 | 777         | 3 8   | 11·5                                | 9,400   |
| " " October 31, 1885..            | 16,542     | 18 4  | 529       | 0 6   | 7 6                                 | 499         | 12 2  | 7·2                                 | 11,520  |
| " " January 30, 1886..            | 14,120     | 7 6   | 549       | 9 11  | 9·3                                 | 460         | 5 6   | 7 8                                 | 11,200  |
| " " May 1, 1886..                 | 16,190     | 5 3   | 556       | 12 0  | 8·3                                 | 560         | 19 3  | 8·3                                 | 11,130  |
| " " July 31, 1886..               | 16,467     | 16 11 | 538       | 0 6   | 7 9                                 | 585         | 11 5  | 8·5                                 | 11,490  |
| * " " December 25, 1886..         | 28,856     | 18 8  | 980       | 7 10  | 8·2                                 | 942         | 0 7   | 7·8                                 | 15,500  |
| " " March 25, 1887..              | 14,242     | 19 10 | 602       | 18 11 | 10·1                                | 256         | 19 6  | 4·3                                 | 14,150  |
| " " June 25, 1887..               | 18,416     | 14 3  | 602       | 10 3  | 7·8                                 | 616         | 6 6   | 8·0                                 | 13,185  |
| Totals .....                      | 163,762    | 2 6   | 5,432     | 17 10 | 7·9                                 | 5,904       | 1 0   | 8·6                                 | ..      |

\* Twenty-one weeks.

# SCOTTISH

## CO-OPERATIVE WHOLESALE SOCIETY

### LIMITED.

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## FURNITURE DEPARTMENT.

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THE word Furniture has a very wide significance, including, as it does, all objects in metal, wood, stone, or other material used in any building, and not forming part of the fabric itself. Thus we have Church Furniture, Office Furniture, and Household Furniture. Then the word is often employed to designate many kinds of ironmongery or hardware goods, such as Carriage, Door, and Hall Furniture, and various other sorts that will readily occur to the reader. It is not, however, in this wide sense that we use the word here, but in the common and restricted sense of the term only, and more particularly as it relates to articles of Household Furniture made entirely, or mainly of wood.

In speaking of Furniture, then, in this sense of general acceptation, it will readily be admitted that few of our surroundings, or indeed anything of a material kind, can more strongly or clearly illustrate the habits and mark the progress of a people's civilisation. Equally does the kind and nature of the Household Furniture indicate the condition of the useful and decorative arts; and how far these are appreciated and cultivated by the people.

The ancients, we know, had tables, chairs, stools, couches, and bedsteads. Cabinets were then, however, unknown, though the trade of Furniture making appears to have taken its name from this now common article of the home, as those engaged in this particular industry were previously simply known as "workers in wood." Sideboards, also, and "chests of drawers" were equally unknown to the ancients. The "chest of drawers"—with which, perhaps, we in Scotland have more to do than with any other article of furniture, since it appears in every home that can boast of a "but and a ben"—was unknown till a comparatively recent period.

Before this arrangement of drawers and shuttles was introduced, the ordinary chest or box was the receptacle of all small household valuables and treasured heirlooms; and often much art and cost were expended in their decoration, as well as in making them thoroughly safe and secure.

The characteristic features of the furniture of the middle ages are well known to all who take an interest in this department of art industry. In every old cathedral or time-worn abbey at home or abroad specimens are to be seen, and the public can



form a judgment as to the tastes and leanings in art of our forefathers. Some, indeed many, of the designs are heavy and ponderous, and point to communities overborne by dread or melancholy, and conveying to their productions in art-work the same dark and dismal ideas. The cheerfulness of striking contrast, or pleasing variety of the mixed straight and flowing line, are seldom met with. The craftsman seems to have had some mental sword of Damocles suspended above him as he sat and carved the dull and heavy outline. The fifteenth century, however, brought a change. The people appear then to have thrown off their boding fears—to have substituted the gay and the happy for the sad forms of the past, and to have gone with almost revolutionary spirit to other and better forms. This period we call that of the "Renaissance," or revival, a kind of spring time of modern ideas in thought and design; a period when men sought a wider mental field, struck into new lines, displayed greater depths of intellect and feeling, and evinced a tendency to greater liberality and variety of view. This period may be called the birth era of our present system of progressive civilisation and advancing improvement; a system in which we seek to blend all that is beautiful and valuable in the past, with all that the greater knowledge and experience of modern days has called into existence.

Our trade being almost entirely confined to the working classes, the latitude for displaying variety in design is considerably hampered; at the same time we have occasionally an opportunity of producing goods of a higher class, and at such times we have shown that furniture of this description can be produced by us as good and as cheap as by any other firm. Up to the end of 1884 this branch formed a section of the Drapery Department, the goods being purchased from outside makers in the "white," *i.e.*, unpolished and finished on our own premises. Those goods, such as Sofas, Chairs, &c., were also upholstered by our own workers, for a considerable time prior to above date, with such success as to suggest that the more important work, that of manufacturing Chests of Drawers, Wardrobes, Tables, &c., should be attempted, and also because of the ever-increasing demand, and the fact that furniture made by outsiders could not be recommended with the same confidence as if made by ourselves. Accordingly, in November, 1884, a workshop was rented and a commencement made. The start, like that of the other departments, being a very modest one, ten workmen only being employed, whereas to-day we employ thirty-four in the various branches—a fact which indicates the success we have achieved. At present we have outgrown our accommodation, and will have to wait the erection of larger premises before we can spread our restricted borders further. When this want is supplied, and with the aid of machinery, we will be in a position to supply every co-operative family in Scotland with furniture manufactured in our own workshops. Those societies who, with commendable enterprise have opened Furnishing Departments, have a true eye to business in attempting to cater for and please every young man or maiden who may be contemplating following the example of our common ancestors in starting a co-operative society on their own account; and we take this opportunity of pointing out that if every son or daughter of every member of every store in Scotland in taking this step were to have their supplies sent from the Wholesale, our Furniture Factory would be second to none in Scotland, and further, in claiming this, we are asking for no more than we are entitled to, because to the extent of every individual realising his or her responsibility in being a factor in the building up of the co-operative fabric, to that extent will it

be successful. We guarantee the same quality at the same price as can be had from any other manufacturer; so that it only remains for societies themselves to be loyal to us, and their members in turn to be loyal to them, to bring about that consummation of which the early pioneers of the movement spoke so much and looked forward to, when every man, at least every co-operator, would "participate in the result of his own labour." As we have dwelt at considerable length in giving a review of the word "Furniture" and of the trade as it more particularly concerns us, we feel that to give more than a passing notice to the large variety of goods which are included under the above heading, or in their distribution, would be to take up more space than is allocated to us for this purpose; at the same time we cannot close this paper without reverting to the distributive section of the department. The Wholesale being *universal providers*, we supply from stock all classes of goods for use in or to adorn the home, and in this respect the department may be said to have been fairly successful. We subjoin a list of the goods kept in stock, which are bought in the best markets at the lowest possible prices; and in order to facilitate the better keeping of the stock, and also the despatch of orders entrusted to us, we have subdivided the department into various sections as follows:—

No. 1. Consisting of Household Furniture, Carpets, Floorcloth, and Pictures.

No. 2. Of Iron Beds, and Bed Chairs; Hair, Wool, and Straw Mattresses; Feather and Wool Beds, Bolsters, and Pillows.

No. 3. Of Kitchen Ranges, Register Grates, Fenders, and Fireirons; Hollow-ware, Tinware, Galvanised Goods, Mangles, and Wringers; Lamps and Crockery.

No. 4. Of Table and Pocket Cutlery, Spoons; Weighing Machines, Beams, and Scales; Edged Tools and Sewing Machines.

No. 5. Of Brushes of all kinds, Sponges, Combs; Wooden Goods, such as House Steps, Roller Pins, Clothes Pins, Winter Dykes, Knife Boards, Window Rollers, Tubs, &c.; Fancy and other Baskets, and Perambulators.

No. 6. Of Pianos, Organs, and Harmoniums, Accordeons and Concertinas; Wood-cased Clocks of all kinds, Marble Clocks and Bronze Ornaments, Barometers and Thermometers, Gold and Silver Lever and Geneva Watches, Jewelry, and Electro-plated Goods; Albums, Ladies' and Gents' Bags and Purses; Meerscham and other Pipes; and a large variety of Fancy Goods, useful and ornamental.

As many societies have not yet attempted to supply their members with the bulk of the goods enumerated in the above list, we would respectfully call their attention to the same; and, to those societies whose membership would warrant it, the opening of a Furniture and Furnishing Department, with a good servant in charge, would, we feel confident, be a success, as there is a large sum annually being put past the store, the profit on every penny of which is a loss to the movement.



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

QUARTERLY STATEMENT, FURNITURE AND FURNISHING DEPARTMENT, FROM DATE OF KEEPING A SEPARATE ACCOUNT.

|                                   | Net Sales. |       | Expenses. |       | Rate per £ of Sales. |  | Net Profit. |       | Rate per £ of Sales. |  | Stocks. |  |
|-----------------------------------|------------|-------|-----------|-------|----------------------|--|-------------|-------|----------------------|--|---------|--|
|                                   | £          | s. d. | £         | s. d. | d.                   |  | £           | s. d. | d.                   |  | £       |  |
| Quarter ending January 31, 1885.. | 3,022      | 18 2  | 210       | 11 11 | 16 7                 |  | 81          | 13 3  | 6 4                  |  | 3,500   |  |
| " " May 2, 1885..                 | 2,636      | 9 6   | 262       | 5 10  | 23 8                 |  | 14          | 17 11 | 0 4                  |  | 4,410   |  |
| " " August 1, 1885..              | 7,200      | 12 9  | 392       | 6 7   | 13 0                 |  | 221         | 4 9   | 7 4                  |  | 4,620   |  |
| " " October 31, 1885..            | 5,599      | 11 1  | 420       | 1 5   | 18 0                 |  | 133         | 3 10  | 5 6                  |  | 5,600   |  |
| " " January 30, 1886..            | 6,744      | 8 11  | 445       | 7 4   | 15 8                 |  | 145         | 4 10  | 5 2                  |  | 6,180   |  |
| " " May 1, 1886..                 | 7,026      | 7 0   | 470       | 18 2  | 16 0                 |  | 195         | 9 8   | 6 4                  |  | 7,020   |  |
| " " July 31, 1886..               | 9,621      | 1 11  | 500       | 9 6   | 12 4                 |  | 410         | 10 0  | 10 2                 |  | 7,650   |  |
| " " *December 25, 1886..          | 13,157     | 12 1  | 914       | 4 7   | 16 6                 |  | 292         | 9 7   | 5 4                  |  | 7,400   |  |
| " " March 25, 1887..              | 7,315      | 11 8  | 577       | 14 1  | 18 9                 |  | 160         | 16 8  | 5 2                  |  | 8,750   |  |
| " " June 25, 1887..               | 11,033     | 17 4  | 590       | 17 11 | 12 8                 |  | 641         | 14 4  | 13 9                 |  | 9,290   |  |
| Totals.....                       | 73,358     | 10 5  | 4,784     | 17 4  | 15 6                 |  | 2,277       | 9 0   | 7 4                  |  | ..      |  |

\* Twenty-one weeks. † Loss.



## SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## PRODUCTIVE DEPARTMENTS—QUARTERLY STATEMENT.

## CABINET WORKSHOP.

|                            | Production. | Expenses.  | Rate<br>per<br>Cent. | Net Profit.       | Rate<br>per<br>Cent. | Net Loss. | Rate<br>per<br>Cent. |
|----------------------------|-------------|------------|----------------------|-------------------|----------------------|-----------|----------------------|
|                            | £ s. d.     | £ s. d.    |                      | £ s. d.           |                      | £ s. d.   |                      |
| January 31, 1885 .....     | 144 3 9     | 102 19 9   | 71.52                | ..                | ..                   | 10 6 0    | 6.94                 |
| May 2, 1885 .....          | 338 8 1     | 179 12 0   | 52.95                | 4 1 11            | 1.18                 | ..        | ..                   |
| August 1, 1885 .....       | 388 0 5     | 228 3 10   | 58.76                | 16 14 8           | 4.12                 | ..        | ..                   |
| October 31, 1885 .....     | 417 17 7    | 214 13 5   | 51.31                | 9 19 8            | 2.39                 | ..        | ..                   |
| January 30, 1886 .....     | 361 0 0     | 219 0 5    | 60.66                | 15 14 5           | 4.30                 | ..        | ..                   |
| May 1, 1886 .....          | 371 8 1     | 209 0 6    | 56.06                | 0 6 11            | ..                   | ..        | ..                   |
| July 31, 1886 .....        | 504 6 6     | 276 16 0   | 54.76                | 14 7 6            | 2.77                 | ..        | ..                   |
| *December 25, 1886 .....   | 994 19 4    | 499 14 10  | 50.15                | 69 3 5            | 6.93                 | ..        | ..                   |
| March 26, 1887 .....       | 620 2 1     | 312 11 11  | 50.32                | 18 1 0            | 2.90                 | ..        | ..                   |
| June 25, 1887 .....        | 582 12 0    | 326 19 9   | 56.18                | 6 18 3            | 1.20                 | ..        | ..                   |
| Totals to June 25, 1887 .. | 4,722 17 10 | 2,569 12 5 | 54.40                | 155 7 9<br>10 6 0 | ..<br>..             | 10 6 0    | ..                   |
|                            |             |            |                      | 145 1 9           | 3.09                 |           |                      |

\* Twenty-one weeks.

# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

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## PRINTING DEPARTMENT.

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THIS, the latest addition to our productive works, is situated in the Society's new premises in Clarence Street, and has been furnished in a very complete manner with entirely new plant, and the most improved machinery. Every necessary provision has been made for carrying on the several branches of Letterpress Printing, Paper Ruling, Stationery, and Bookbinding; and every possible facility has been provided for carrying on a large business.

While the Directors of the Scottish Wholesale have no desire, and certainly no intention, of entering into competition with any existing Co-operative Printing Institution, their knowledge and experience has already proved that there is a wide unoccupied field, especially in the West of Scotland and other districts, for this department of productive enterprise. In the districts referred to, a large proportion of the printing and bookbinding work of co-operative societies (which is every year growing in volume) finds its way, from want of proper facilities and the practical non-existence of a direct co-operative medium, into the hands of private firms. Many societies in the federation have had in consequence to suffer considerably, alike in time and convenience, from this cause. To remove this difficulty and to provide a really co-operative medium for this class of work, our new Printing Department has been established in Glasgow, and we trust that the societies in connection with the Wholesale will take full advantage of the facilities it offers, and so reap the benefits it is intended—and certain—to confer upon the movement in Scotland.

It is a well-known truism in business that "Time is money," and this probably applies with greater force to our co-operative societies than to private firms. The limited time at the disposal of societies' committee-men (borrowed as it is from their all too-limited leisure) in the preparation of their accounts and business sheets, makes it necessary that in transmitting the same, in printed form, to the members,

the greatest celerity and despatch should be attainable. Looked at in this light it is obvious that a printing establishment devoted solely to the production of co-operative work, and free from the embarrassments and hurry of an outside and general trade, and having a staff trained to the requirements of such special business, must possess these advantages in the highest degree. It must also prove a valuable aid and assistance to societies' officials in placing at their disposal information and guidance in matters which require special knowledge, such as the registration of new or amended rules, or the equipment of a society with the most improved forms of account and report books and ledgers.

To all such matters, special attention will be devoted in our new Printing Department, and no effort will be spared to combine moderate charges with prompt service and careful workmanship.

Might we not add one further consideration which should commend this and all our other productive branches to the hearty sympathy and support of co-operators, namely, that by ensuring its success through their loyal support and in sharing with their employés the profits accruing, they are doing something to realise the co-operative ideal—the reconciliation of the aims and claims of capital and labour.

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## BONUS ON LABOUR.

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BONUS on wages to employés has been paid from quarter ending November 19, 1870. From that date till November, 1884, the rate paid in wages per £ was double the rate of dividend paid on members' purchases per £; but on the latter date this arrangement was cancelled, and a new rule framed, which is now in operation. This rule is to the effect that employés in the distributive departments receive a similar rate per £ on their wages as is paid per £ on members' purchases, and the workers in the productive departments are paid in accordance with the profits made in those departments in the aggregate in the following manner:—The net profit, after meeting all charges, including interest on capital employed, is divided at so much per £ equally between purchases and wages earned. While the rate paid to the employés in the distributive departments has been a steady rate, the results in the productive departments, being variable, have caused fluctuations in the rate per £ paid as bonus. The rates have ranged from 1d. to 7d. per £; the average for the time during which these payments have been made being 4½d. per £.



Statement showing amount paid to employés as bonus on labour, from November 19, 1870, to June 25, 1887:—

|                                        |   |          |          | Amount. |    |    | Average Rate<br>per £. |       |
|----------------------------------------|---|----------|----------|---------|----|----|------------------------|-------|
|                                        |   |          |          | £       | s. | d. | s.                     | d.    |
| Quarter ending November 19, 1870       |   |          | .....    | 5       | 11 | 0  | ....                   | 0 8   |
| Year                                   | " | "        | 18, 1871 | 40      | 10 | 0  | ....                   | 0 10½ |
| "                                      | " | "        | 16, 1872 | 52      | 7  | 0  | ....                   | 0 9½  |
| "                                      | " | "        | 15, 1873 | 90      | 1  | 8  | ....                   | 0 9½  |
| "                                      | " | "        | 14, 1874 | 116     | 9  | 0  | ....                   | 0 8½  |
| "                                      | " | "        | 13, 1875 | 109     | 15 | 4  | ....                   | 0 8   |
| "                                      | " | "        | 4, 1876  | 108     | 13 | 4  | ....                   | 0 8   |
| "                                      | " | "        | 3, 1877  | 121     | 10 | 0  | ....                   | 0 8   |
| "                                      | " | "        | 2, 1878  | 147     | 17 | 0  | ....                   | 0 8   |
| "                                      | " | "        | 2, 1879  | 203     | 3  | 0  | ....                   | 0 9½  |
| "                                      | " | October  | 30, 1880 | 322     | 9  | 3  | ....                   | 1 1   |
| "                                      | " | November | 5, 1881  | 368     | 3  | 8  | ....                   | 1 0   |
| "                                      | " | "        | 4, 1882  | 453     | 9  | 1  | ....                   | 0 11  |
| "                                      | " | "        | 3, 1883  | 542     | 3  | 0  | ....                   | 0 11½ |
| "                                      | " | "        | 1, 1884  | 484     | 2  | 6  | ....                   | 0 9½  |
| "                                      | " | October  | 31, 1885 | 483     | 13 | 1  | ....                   | 0 6¾  |
| "                                      | " | December | 25, 1886 | 873     | 0  | 6  | ....                   | 0 6½  |
| Six months                             | " | June     | 25, 1887 | 363     | 15 | 10 | ....                   | 0 6½  |
| Total payments to employés as bonus on |   |          |          |         |    |    |                        |       |
| labour.....                            |   |          |          | £4886   | 14 | 3  | ....                   | ..    |

SCOTTISH  
CO-OPERATIVE WHOLESALE SOCIETY  
LIMITED.

## INSURANCE FUND.

This fund was started during the forty-fifth quarter, ending 1st November, 1879, as a Marine Insurance Fund, but on the recommendation of the directors the delegates agreed on May 28th, 1887, to incorporate with that fund a Fire Insurance Fund, and take an increasing amount of the risks on the society's premises and stock, as is warranted from time to time by the amount of the fund. Owing to the insurances for the current year not having been out by the end of the quarter to which the following statement is made up, no additions have been made to the fund by premiums charged for insuring against fire. It will be seen from the statement annexed that the result of the working of this fund up to the present has been extremely satisfactory. The premiums charged against the trade account, had not the fund been in operation, would have been paid over to the Underwriters. These amounted to £3,663. 3s. 1d. to date to which statement is prepared, and during the same period the losses amounted to £1,766. 19s. 11d., showing a surplus of £1,896. 3s. 2d. saved to the society by doing its own Marine Insurance.

## INSURANCE FUND.

STARTED DURING QUARTER ENDING 1ST NOVEMBER, 1879.

[illegible]

# SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

## NUMBER OF EMPLOYEES, SEPTEMBER, 1887.

|                                |     | Collective<br>Totals. |
|--------------------------------|-----|-----------------------|
| Glasgow—Office Department..... | ..  | 55                    |
| — Watchmen .....               | ..  | 2                     |
| — Grocery and Provision .....  | 44  |                       |
| — Ham Curing .....             | 10  |                       |
| — Potatoes .....               | 2   |                       |
|                                | 56  |                       |
| — Drapery .....                | 53  |                       |
| — Millinery .....              | 7   |                       |
| — Mantle .....                 | 11  |                       |
| — Hosiery .....                | 21  |                       |
| — Shirt.....                   | 31  |                       |
| — Tailoring .....              | 154 |                       |
|                                | 277 |                       |
| — Boot and Shoe .....          | 18  |                       |
| — Factory .....                | 249 |                       |
|                                | 267 |                       |
| — Furniture.....               | 25  |                       |
| — Cabinet .....                | 24  |                       |
| — Upholstery .....             | 8   |                       |
| — Joiners and Bricklayers..... | 50  |                       |
| — Printing .....               | 15  |                       |
|                                | 122 |                       |
| — Carting .....                | ..  | 14                    |
| Total for Glasgow .....        | 793 |                       |
| — Leith.....                   |     | 35                    |
| — Kilmarnock .....             |     | 9                     |
| — Dundee.....                  |     | 3                     |
| — Enniskillen .....            |     | 6                     |
| — Greenock .....               |     | 1                     |
|                                |     | 847                   |



# Nineteen Years' Wholesale Distribution in Scotland.



## Scottish Co-operative Wholesale Society Limited.

| YEARS          | CAPITAL. | SALES.     | PROFITS. | YEARS          |
|----------------|----------|------------|----------|----------------|
|                | £        | £          | £        |                |
| 1868. 13 weeks | 1,795    | 9,697      | 48       | 13 weeks, 1868 |
| 1869, 52 "     | 5,175    | 81,094     | 1,304    | 52 " 1869      |
| 1870, 50 "     | 12,543   | 105,249    | 2,419    | 50 " 1870      |
| 1871, 52 "     | 18,009   | 162,658    | 4,131    | 52 " 1871      |
| 1872, 52 "     | 30,931   | 262,530    | 5,435    | 52 " 1872      |
| 1873, 52 "     | 50,433   | 384,489    | 7,446    | 52 " 1873      |
| 1874, 52 "     | 48,982   | 409,947    | 7,553    | 52 " 1874      |
| 1875, 52 "     | 56,751   | 430,169    | 8,233    | 52 " 1875      |
| 1876, 51 "     | 67,219   | 457,529    | 8,836    | 51 " 1876      |
| 1877, 52 "     | 72,563   | 589,221    | 10,925   | 52 " 1877      |
| 1878, 52 "     | 83,174   | 600,590    | 11,969   | 52 " 1878      |
| 1879, 52 "     | 93,077   | 630,097    | 14,989   | 52 " 1879      |
| 1880, 52 "     | 110,179  | 845,221    | 21,685   | 52 " 1880      |
| 1881, 54 "     | 135,713  | 986,646    | 23,981   | 54 " 1881      |
| 1882, 52 "     | 169,429  | 1,100,588  | 23,220   | 52 " 1882      |
| 1883, 52 "     | 195,396  | 1,253,154  | 28,366   | 52 " 1883      |
| 1884, 52 "     | 244,186  | 1,300,331  | 29,435   | 52 " 1884      |
| 1885, 52 "     | 288,946  | 1,433,220  | 39,641   | 52 " 1885      |
| 1886, 60 "     | 333,653  | 1,857,152  | 50,398   | 60 " 1886      |
| 1887, 26 "     | 353,950  | 818,012    | 20,439   | 26 " 1887      |
| TOTALS.        | 353,950  | 13,722,603 | 320,454  | TOTALS.        |



COMMENCED  
SEPTEMBER, 1868.



# CO-OPERATION :

ITS SPREAD AND ITS POWER.

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BY THOMAS SWANN.

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CO-OPERATION is no idle dream,  
 Co-operation is no vain emprise,  
 Co-operation is no selfish scheme,  
 Co-operation is no doubtful prize.

Co-operation is a mighty power,  
 Co-operation is a wond'rous theme,  
 Co-operation is a goodly dower,  
 Co-operation is a living stream.

It waters many a village, many a town,  
 It glides along by city, hamlet, vale,  
 Until from streamlet small to river grown,  
 Its ships upon its bosom safely sail.

Onward it flows with ever-gath'ring strength,  
 Onward it flows with calm, resistless force ;  
 It widens, deepens, and extends its length,  
 Pushing aside all that impedes its course.

If for a moment checked by barriers thrown  
 By envious foes athwart its onward way,  
 With swelling volume soon its weight breaks down  
 The opposition, sweeping all away.

From north to south, from east to west it winds,  
 Bearing its blessings to the people's doors  
 In wholesale measure, in a tie that binds  
 In bonds fraternal all its kindred stores.



The desert places it has made to bloom,  
 Clothing with verdure the unbounded field  
 Of varied labour, and dispell'd the gloom  
 Which ignorance and want so often yield.

It scatters plenty o'er the thirsty land,  
 It to the sons of toil affords relief,  
 It to the needy gives its helping hand,  
 It cheers the widow in her day of grief.

Of its refreshing waters all may drink,  
 Of its full bounty all may freely take ;  
 Then come, ye toil-worn, come ye to the brink,  
 Take of its fulness and provision make.

Provision make for bread in time of need,  
 Provision make for rest in coming age ;  
 Upon the waters cast the precious seed,  
 And it shall prosper and your want assuage.

So shall Co-operation prove its worth,  
 Then shall Co-operation comfort bring ;  
 So shall Co-operation bless the earth,  
 Then shall Co-operators gladly sing—

“ Co-operation is no idle dream,  
 Co-operation is no vain emprise,  
 Co-operation is no selfish scheme,  
 Co-operation is no doubtful prize.

“ Co-operation is a mighty power,  
 Co-operation is a wond'rous theme,  
 Co-operation is a goodly dower,  
 Co-operation is a living stream.”

\* \* \* \* \*

Ye, who would trace this river to its source—  
 Ye, who would note its progress gradual—  
 Turn o'er these leaves ; there you shall find its course  
 Described in this—THE WHOLESALE'S “ ANNUAL.”

# INLAND NAVIGATION.

BY JAMES W. HARVEY.

## SYNOPSIS.

- I. Early Origin of Inland Navigation.
- II. The Inland Navigation System of England and Wales.
  - (a) Earlier Developments.
  - (b) Inland Routes from Coast to Coast in England and Wales.
  - (c) Summary of Acts of Parliament authorising works for the improvement of Rivers or the construction of Canals, for the purpose of Navigation in England and Wales.
  - (d) The Beneficial Advantages resulting from the labours of our Canal makers.
  - (e) Tabular Statement illustrating the growth of the Inland Navigation System of England and Wales, with particulars of the dates of authorisation, the dimensions, amount of capital, traffic, and earnings of the respective Waterways.
  - (f) Half a Century of National Neglect of Inland Navigation.
  - (g) The Improvements necessary for the correction of the Defects of our System of Inland Navigation.
  - (h) The Potentiality of our Waterways.
  - (i) Waterways as Investments.
  - (j) Notes on Probable Outlay required for the Improvement of our Waterways.
- III. The Waterways of Scotland.
- IV. Internal Navigation in Ireland.
- V. Inland Navigation in France.
- VI. The Great Water Highways of the Dominion of Canada.
- VII. Navigable Waterways of the United States.
- VIII. Inland Navigation in Russia.
- IX. Inland Navigation in Sweden.
- X. Inland Navigation in Italy.
- XI. Inland Navigation in Spain.
- XII. Inland Navigation in Holland and Belgium.
- XIII. Inland Navigation in Germany and Austria.
- XIV. Inland Navigation in India.
- XV. The Suez Canal.
- XVI. The Panama Canal.

## I.—EARLY ORIGIN OF INLAND NAVIGATION.

THE origin of Inland Navigation is involved in complete obscurity, and belongs to the pre-historic period. The comparative cheapness of conveyance by water and the facilities afforded by water transport seems to have been appreciated by the earliest inhabitants of the globe, and in most parts of the globe there is evidence showing early consciousness of the importance of waterways in the economy of intercommunication. The first enterprise in the provision of an artificial waterway which comes within the historical record, was the construction of a great canal in Egypt, which enabled through water communication between the Nile and the Red Sea—a canal which, to a certain extent, anticipated the functions of the Suez Canal by twenty-one centuries. This waterway was commenced by Pharaoh Necho, son of

Psammetichus, about B.C. 225. It was completed by Ptolemy II. (Philadelphus) about B.C. 675. Almost simultaneously with the commencement of the Nile and the Red Sea Canal by Pharaoh Necho, Periander, the powerful tyrant of Corinth, took steps for cutting the Isthmus of Corinth, which connects the Morean Peninsula with Hellas, the mainland of Greece; these efforts, however, led to no practical result. Later on, about B.C. 625, the project was considered by Demetrius Polycrates, but he abandoned it on the advice of his engineers, who condemned it on the ground that the level of the sea was higher in the Gulf of Corinth than in the Gulf of Athens. It was alleged that were this foolhardy scheme carried out, Ægina and the neighbouring islands would be flooded and lost irreparably to the world. Afterwards, Julius Cæsar, Caligula, and Claudius respectively interested themselves in the project for cutting the Corinthian Isthmus. It was not, however, until A.D. 67 that the first serious practical move was made. In that year the Emperor Nero cut the first sod, and employed on the works some thousands of captive Jews and numerous gangs of convicts. On the death of Nero the works were stopped, and the enterprise remained in abeyance for eighteen centuries. In 1882 the International Corinth Maritime Canal Company was formed to carry out the undertaking which is now approaching completion. By uniting the Gulf of Lepanto with the Ægean Sea Corinth will be within four hours' steam of the Piræus. At present vessels making for Athens from the west have to proceed around the Peninsula of the Morea, and have to double Cape Matapan, involving a detour of 400 to 500 miles.

Although the Romans did not distinguish themselves in canals for navigation purposes, they constructed stupendous aqueducts or canals for the conveyance of water to supply their populous cities, the ruins of which attest the wealth and power of the constructors and the magnificence of their works. Nevertheless, Germany, France, and England were the scenes of canal construction to a limited extent, under the direction of Roman engineers, but more especially for military objects than trade purposes. About B.C. 16, Drusus, who had the command of an army under the Emperor Octavianus (Augustus), which had to enter Germany, caused a canal to be made from the Rhine to the Issel for the sole purpose of the conveyance of his troops. Lucius Verus, when the Roman army under his command was in Gaul, attempted to make a canal between the Moselle and the Rhine. About A.D. 42, during the reign of Claudius, the Romans constructed a canal between the Rhine and the Maas, supposed to be the canal which connects Leyden with Sluys. This canal, twenty-three miles in length, occupied the labour of 30,000 men for twelve years. In England we are indebted to the Romans for our first canals. One of these, the Caer Dyke, extended from the Nene, near Peterborough, to the Witham, near Lincoln, a distance of forty miles. What is supposed to have been a continuation of the navigation of the Caer Dyke, the Foss Dyke, extends from Torksey, some ten miles south of Gainsborough, to Lincoln. The objects of the Romans in making these navigable canals are supposed to have been the provision of a more secure means of transit for the corn produce of the fertile counties of Lincoln and Northampton to their station at Eboracum (York), instead of sending by the uncertain and circuitous route seaward. The Foss Dyke is still used for the export of produce and the import of coals.



## INLAND NAVIGATION.

Navigable canals were constructed in China at a very early period. The most celebrated canal of that country is that known to Europeans as the Imperial Canal. The main canal is 650 miles length, and there issues from it numerous collateral cuts. Its least width is 200 feet at the surface, but at some points its surface width is quite 1,000 feet. The canal is said not to have at any time more than five to six feet of water, and during dry seasons it is often reduced in depth to three feet. It commences at Hang Chow, crossing on its route the Yang-tse-Kiang river and the Hoang-Ho river, and terminates at Lin-tsing on the Eu-ho river, which joins the Pei-ho river. By this navigation there is through inland water communication between Hang-Chow and Peking. Owing to the comparatively level character of the country it traverses, no tunnels or aqueducts have been required in its construction. The differences in level are overcome by stop gates and inclined planes, the junks being lowered or raised by means of powerful capstans, worked by animal power. The principal object of the construction of the Imperial Canal was the cheap conveyance of the rice supplies from the Paddy Fields of the Southern provinces to the population of North China. It is said to have been completed A.D. 980, as the result of the labour of 30,000 men for forty-three years. Some authorities assign its execution, as regards the Southern portion to the eighth century, and of the Northern portion to the thirteenth century. There is an extensive traffic, and the Government are reputed to find employment for over 10,000 junks. A very large floating population lives upon these junks, which they seldom leave during the course of their lives.

## II. THE INLAND NAVIGATION SYSTEM OF ENGLAND AND WALES.

### (a) EARLIER DEVELOPMENTS.

**A**FTER the construction of the Caer Dyke and the Foss Dyke by the Romans there is no further record until the early part of the fifteenth century. In 1423, the second year of the reign of Henry VI., an Act of Parliament was obtained for the improvement of the Thames for the purposes of navigation. Many Acts were obtained from the fifteenth to the eighteenth century for the improvement of rivers, but from the period of the Roman occupation there does not appear to have been any artificial canal made in this country until the middle of the eighteenth century. The first canal which appears to have been constructed in this country in modern times is the Sankey Brook Navigation, which was authorised by Parliament in 1755. The Sankey Brook Navigation connects St. Helens with the Mersey estuary.

Before the completion of the Sankey Navigation the illustrious Duke of Bridgewater, who has justly been styled "the father of British Inland Navigation," obtained an Act of Parliament in 1759, under which he constructed a canal to connect his coal mines at Worsley with Manchester. The beneficial effect of the Worsley Canal is evidenced by the fact that the price of coals, which had hitherto sold in Manchester

## INLAND NAVIGATION.

at 2s. 6d. per cwt., fell to 7d. on the opening of the canal. At Worsley the duke had a number of underground canals, which collectively were eighteen miles in length, made at a cost of £169,000. By means of small boats, the coal was brought through these tunnelled waterways directly from the level of the workings in the duke's collieries on to the Worsley Canal for conveyance to Manchester. The Duke of Bridgewater was so satisfied with the success of his first experiment that, in 1762, he obtained further powers from Parliament, and constructed an extension of his canal in order to connect Manchester with Runcorn, from which access is obtained to Liverpool by the estuary of the Mersey. The duke was influenced to carry out this great design because of the high cost of carriage between Manchester and Liverpool, which was 12s. per ton on the Mersey and Irwell Navigation, and the cost of land carriage was 40s. per ton. The duke was limited by the statute he obtained to 6s. a ton. The service on the duke's canal was not only cheaper but more rapid, regular, and efficient. These advantages made the canal a serious rival of the Mersey and Irwell Navigation. With further authority obtained in 1795, the duke extended his canal from Worsley to Leigh. The total length of the Bridgewater Canals is  $39\frac{3}{4}$  miles. They were planned and executed by the celebrated James Brindley, and cost £250,000, the whole of which was the private outlay of the enterprising duke. These figures do not include the £169,000 expended on the subterranean tunnels and canals at the Worsley collieries, nor the mileage of those works.

## (b) INLAND WATER ROUTES FROM COAST TO COAST IN ENGLAND AND WALES.

Four years after the Duke of Bridgewater obtained powers for the extension of his canal to Runcorn, Parliament, in 1766, authorised the construction of the Grand Trunk, or Trent and Mersey Canal. This very important undertaking extends from Wilden Ferry, on the River Trent, to Preston Brook, where it joins the Bridgewater Canal at a point four miles from Runcorn. It is 89 miles in length. In its course there are 127 aqueducts and culverts, 91 locks, and six tunnels. The Harecastle Tunnel is 2,880 yards long. This canal cost over £1,000,000, and was completed in 1777. The connection of the Mersey with the Trent, which flows into the Humber, enabled through inland navigation between Liverpool and Hull, thus connecting the Irish Sea with the North Sea, and constituting the first through inland water route in England enabling a passage from sea to sea.

In the same year that Parliament authorised the Trent and Mersey Canal, sanction was also given for the construction of another important waterway, the Staffordshire and Worcestershire Canal, which was made during the construction of the Trent and Mersey Canal, and connects that canal with the River Severn, providing a through inland water route between the Severn and the Mersey, and also connecting the Severn with the Humber by means of the Trent and Mersey Canal, the Trent Navigation and the Humber. The Trent and Mersey Canal thus enables intercommunication by inland navigation between the ports of Liverpool, Bristol, and Hull, and forms the link in a through inland water route between the Irish Sea



## INLAND NAVIGATION.

and the North Sea, the Bristol Channel and the Irish Sea, and the Bristol Channel and the North Sea. It is also a link in two of the through inland water routes between the Mersey and the Thames.

In 1783, the Thames and Severn Canal, a very important waterway, was authorised by Parliament. A short canal called the Stroudwater Navigation, about eight miles in length, extends from the River Severn to Wallbridge, near Stroud. The Thames and Severn Canal, which is 30 miles in length, connects the Stroudwater Navigation with the Thames and Isis Navigation at Lechlade, in Wiltshire. It enables a through inland water route between the Severn and the Thames, connecting Bristol with London, and forming a second through route between the Bristol Channel and the North Sea. The first vessel passed through on November 19, 1789.

In 1794 the construction of the Rochdale Canal was authorised. Its provision enabled a much shorter through route between Liverpool and Hull than that by way of the Trent and Mersey Canal. It is 35 miles in length, and extends from Castlefield, Manchester—the terminus of the Bridgewater Canal—to the Calder and Hebble Navigation at Sowerby Bridge. By means of the Calder and Hebble Navigation, the Aire and Calder Navigation and the River Ouse, access is gained to the Humber. By this through route the Irish Sea and the North Sea are connected, and Liverpool, Runcorn, Manchester, Rochdale, Littleborough, Todmorden, Halifax, Wakefield, Selby, Goole, and Hull, are placed in intercommunication by inland navigation. The Rochdale Canal was completed in 1804. The works were executed by Sir John Rennie.

The next development in the links connecting sea with sea was the construction of the Grand Junction Canal, which was authorised in 1793, and completed in 1805. The main line of this canal is about 90 miles in length, and the branches make the collective length about 135 miles. This great and most useful undertaking commences in the Oxford Canal at Braunston, in Northamptonshire, and terminates in the River Thames, near Brentford, in Middlesex. Its completion enabled the first inland water communication between the Thames and the Mersey, and also between the Thames and the Humber.

The connection of the great port of London with the other great ports of Liverpool, Bristol, and Hull, was the conception of the celebrated Brindley, and the completion of the Grand Junction Canal in 1805 was the realisation of his magnificent project, but he did not live to see it, having died in 1772, after having made the Bridgewater Canal and projected and partly executed the Staffordshire and Worcestershire Canal, and the Trent and Mersey Canal, both of which are important links in the system of inland navigation between the four great ports of England.

Since 1805, other through routes connecting the east and west coasts and providing further intercommunication between the great ports have been completed. The Kennet and Avon Canal was authorised in 1794, and opened in 1810. It extends from Newbury, in Berkshire, to Bath, in Somersetshire, and connects the Kennet Navigation with the River Avon. The Kennet Navigation joins the River



## INLAND NAVIGATION.

Thames at Reading. The combined length of the Kennet and Avon Canal and the Kennet River Navigation is 74 miles, and enables a further through route between Bristol and London.

Another through inland navigation between Liverpool and Hull is provided by the Huddersfield Canal, which was authorised in 1794, and partially opened in 1798. It was not, however, completed until several years after, when a further Act was obtained in 1806 for raising more funds to finish the works. The length of the canal is  $19\frac{3}{4}$  miles, and of the entire route 147 miles, being the shortest between the east and west coast. It extends from the Ashton-under-Lyne Canal at Dukinfield to Huddersfield, where it is connected with the Calder and Hebble Navigation by a short cut of four miles, known as Sir John Ramsden's Canal. This through route affords intercommunication between Liverpool, Runcorn, Manchester, Ashton-under-Lyne, Stalybridge, Saddleworth, Slaithwaite, Huddersfield, Wakefield, Goole, and Hull.

A fourth inland navigation between Liverpool and Hull is afforded by the Leeds and Liverpool Canal and its connections. This undertaking is the most extensive canal in the kingdom, and cost £1,200,000. The total length, inclusive of branches, is 142 miles, the length of the main line being 127 miles. The main line and branches connect Liverpool, Wigan, Leigh, Manchester, Blackburn, Burnley, Colne, Skipton, Keighley, Bingley, Bradford, and Leeds, and affords access by its connections with Preston, Lancaster, Kendal, Goole, and Hull. The Leeds and Liverpool Canal was authorised in 1770, but was not completed until 1816, having occupied forty-six years in construction. Portions of the canal were, however, opened for traffic in 1775, 1777, 1796, 1801, and 1810 respectively.

The construction of the Grand Union Canal, which was authorised in 1810, and the Regent's Canal, which was authorised in 1812, provided the necessary links for a shorter route between London and Hull, the original route being 323 miles, and the new route being only 289 miles.

## LIST OF THROUGH ROUTES FROM COAST TO COAST.

|                           |    |
|---------------------------|----|
| London to Liverpool.....  | 3  |
| London to Hull.....       | 2  |
| London to Bristol.....    | 4  |
| Liverpool to Bristol..... | 2  |
| Liverpool to Hull.....    | 4  |
| Bristol to Hull.....      | 2  |
| <hr/>                     |    |
| Total .....               | 17 |

As it would be impossible to give in the limits of this article a detailed account of the inland navigation of England and Wales, the accompanying tabular statements (*see pages 134 to 141*) illustrate the growth of the system, with particulars as to dimensions, traffic, capital and revenue, and dates of their authorisation.

## INLAND NAVIGATION.

## (c) SUMMARY OF ACTS OF PARLIAMENT AUTHORISING WORKS FOR THE IMPROVEMENT OF RIVERS, OR THE CONSTRUCTION OF CANALS, FOR THE PURPOSE OF NAVIGATION IN ENGLAND AND WALES (1423—1830):—

| Date of Authority. | Duration of Period. Years. | Acts for First Powers. | Acts for Further Powers. | Total Number of Acts. |
|--------------------|----------------------------|------------------------|--------------------------|-----------------------|
| 1423 to 1499       | .. 76                      | .. 3                   | .. 2                     | .. 5                  |
| 1500 „ 1599        | .. 100                     | .. 5                   | .. 3                     | .. 8                  |
| 1600 „ 1699        | .. 100                     | .. 14                  | .. 8                     | .. 22                 |
| 1700 „ 1749        | .. 50                      | .. 24                  | .. 32                    | .. 56                 |
| 1750 „ 1775        | .. 25                      | .. 33                  | .. 37                    | .. 70                 |
| 1776 „ 1799        | .. 25                      | .. 66                  | .. 88                    | .. 154                |
| 1800 „ 1830        | .. 30                      | .. 43                  | .. 178                   | .. 221                |
|                    | 406                        | 188                    | 348                      | 536                   |

The principal developments in inland navigation in England and Wales occurred between 1750 and 1800. During that period of half a century rather more than one half of the 188 undertakings in the development of our Inland Navigation System was authorised; and, in addition, 125 Acts authorising further powers were obtained.

## (d) THE BENEFICIAL ADVANTAGES RESULTING FROM THE LABOURS OF OUR CANAL MAKERS.

As a matter affecting the economy of national resource, it is rapidly becoming a grave problem whether a country which is the greatest workshop of the world might not, without any detriment to the railway interest, make a more effective use of an earlier and humbler method in the inland transport of commodities—our artificial canals and improved natural waterways.

We have neglected our canals for half a century. Since 1830, until quite recently, there has been virtually no serious attempt to derive the great advantages which inland navigation could render to commerce under appropriate conditions. There are plenty of people who smile to-day at the bare notion of taking canals into account, viewed in relation to the fact of our possession of a magnificent railway system, which is undoubtedly one of the most splendid developments in the world's history. With all its imperfections, our canal system was in its day a truly great development, and bearing in mind the inferior resources existing at the period of its greatest expansion, the second half of the eighteenth century, its rise reflects high credit upon the foresight and energy of the men of that day. The construction of the canals which we are accustomed to look upon nowadays as slow and antiquated things, it is well to bear in mind, infused fresh life into productive industry, developed our home and foreign trade, and the advantages conferred upon the agricultural interest were pre-eminently great. The connection of the four great ports of London, Liverpool, Hull, and Bristol, with hundreds of miles of lateral canals as feeders, was a great conception; and we may safely credit much of our prosperity in these times to the foundations laid by these eighteenth-century canal makers. In

(Continued on page 142.)



(e) TABULAR STATEMENT ILLUSTRATING THE GROWTH OF THE INLAND NAVIGATION SYSTEM  
DIMENSIONS, AMOUNT OF CAPITAL, TRAFFIC, AND

| Name of Waterway.                                 | Date of Act. | Length.   | DIMENSIONS OF LOCKS. |              |         |    |
|---------------------------------------------------|--------------|-----------|----------------------|--------------|---------|----|
|                                                   |              |           | Length.              | Width.       | Depth.  |    |
|                                                   |              | Mls. Fur. | Ft. In.              | Ft. In.      | Ft. In. |    |
| Foss Dyke Navigation (Lincolnshire) .....         |              | 11 0      | ..                   | ..           | ..      | 1  |
| Thames River .....                                | 1423         | 146 0     | 140 0<br>90 0        | 22 0<br>14 6 | ..      | 2  |
| Lee River (Middlesex) .....                       | 1430         | 19 0      | 96 0                 | 13 6         | ..      | 3  |
| Ouse (Yorkshire) .....                            | 1462         | 60 0      | 70 0                 | 22 6         | ..      | 4  |
| Severn River .....                                | 1503         | 44 0      | 270 0<br>99 0        | 35 0<br>20 0 | ..      | 5  |
| Stour River .....                                 | 1514         | 20 0      | ..                   | ..           | ..      | 6  |
| Exe River (Devonshire) .....                      | 1539         | 5 0       | ..                   | ..           | ..      | 7  |
| Welland River (Lincolnshire) .....                | 1571         | 36 0      | ..                   | ..           | ..      | 8  |
| Colne River (Essex) .....                         | 1623         | 3 4       | ..                   | ..           | ..      | 9  |
| New Bedford River .....                           | 1662         | 20 0      | ..                   | ..           | ..      | 10 |
| Stour and Salwerp Rivers (Stafford and Worcester) | 1662         | 20 0      | ..                   | ..           | ..      | 11 |
| Itchin Navigation (Hampshire) .....               | 1662         | 14 0      | 70 0                 | 13 0         | ..      | 12 |
| Wye and Lugg Rivers (South Wales) .....           | 1662         | 99 4      | ..                   | ..           | ..      | 13 |
| Avon River (Wiltshire) .....                      | 1664         | 25 0      | ..                   | ..           | ..      | 14 |
| Medway River (Kent) .....                         | 1664         | 22 6      | 87 6                 | 15 5         | ..      | 15 |
| Bure, Yare, and Waveney Rivers (Norfolk) .....    | 1670         | 105 0     | ..                   | ..           | ..      | 16 |
| Little Ouse (Norfolk and Suffolk) .....           | 1670         | 22 4      | ..                   | ..           | ..      | 17 |
| Wey River (Surrey) .....                          | 1671         | 20 0      | 84 0<br>81 6         | 14 3<br>14 3 | ..      | 18 |
| Witham River (Lincolnshire) .....                 | 1671         | 38 0      | ..                   | ..           | ..      | 19 |
| Aire and Calder Navigation (Yorkshire) .....      | 1699         | 80 0      | 212 0                | 22 0         | 9 0     | 20 |
| Tone and Parrett Navigation (Somerset) .....      | 1699         | 27 0      | ..                   | ..           | ..      | 21 |
| Trent Navigation .....                            | 1699         | 72 0      | 90 0                 | 15 0         | 3 6     | 22 |
| Larke River (Suffolk and Cambridge) .....         | 1700         | 14 0      | No                   | Locks.       | ..      | 23 |
| Dee River Navigation (Cheshire) .....             | 1700         | 10 0      | No                   | Locks.       | ..      | 24 |
| Avon and Frome Rivers (Gloucester and Somerset)   | 1700         | 11 0      | ..                   | ..           | ..      | 25 |
| Derwent River Navigation (Yorkshire) .....        | 1701         | 38 0      | 45 0                 | 15 0         | ..      | 26 |
| Cam River (Cambridge) .....                       | 1702         | 7 0       | ..                   | ..           | ..      | 27 |
| Stour River (Essex and Suffolk) .....             | 1705         | 20 0      | ..                   | ..           | ..      | 28 |
| Nen River (Northamptonshire) .....                | 1714         | 50 0      | 80 0                 | 14 0         | ..      | 29 |
| Kennet River Navigation .....                     | 1715         | 18 4      | 80 0                 | 14 6         | ..      | 30 |
| Wear River (Durham) .....                         | 1716         | 18 0      | ..                   | ..           | ..      | 31 |
| Derwent River (Derby) .....                       | 1720         | 13 0      | ..                   | ..           | ..      | 32 |
| Idle River (Nottingham) .....                     | 1720         | 10 0      | ..                   | ..           | ..      | 33 |
| Weaver Navigation (Cheshire) .....                | 1720         | 24 0      | 65 0                 | 16 9         | ..      | 34 |
| Mersey and Irwell Navigation .....                | 1720         | 57 0      | 66 0                 | 15 6         | ..      | 35 |
| Douglas Navigation (Lancashire) .....             | 1720         | 9 0       | 66 0                 | 15 0         | ..      | 36 |
| Eden River (Cumberland) .....                     | 1721         | 10 2      | ..                   | ..           | ..      | 37 |
| Dun River Navigation (Yorkshire) .....            | 1726         | 39 0      | 53 0                 | 15 2         | ..      | 38 |
| Beverley Beck (Yorkshire) .....                   | 1726         | 0 6       | ..                   | ..           | ..      | 39 |
| Stroudwater Navigation .....                      | 1732         | 8 0       | 70 0                 | 17 6         | 4 6     | 40 |
| Arun River (Sussex) .....                         | 1732         | 5 6       | ..                   | ..           | ..      | 41 |
| Roden River (Essex) .....                         | 1737         | 2 0       | ..                   | ..           | ..      | 42 |
| Lune River (Lancaster) .....                      | 1749         | 43 4      | ..                   | ..           | ..      | 43 |
| Avon River (Worcester) .....                      | 1751         | ..        | ..                   | ..           | ..      | 44 |
| Narr River (Norfolk) .....                        | 1751         | 15 0      | ..                   | ..           | ..      | 45 |



OF ENGLAND AND WALES, WITH PARTICULARS OF THE DATES OF AUTHORISATION, THE EARNINGS OF THE RESPECTIVE WATERWAYS.

|    | Number<br>of<br>Locks. | Rise.   | Fall.   | Authorised<br>Capital. | Volume<br>of Traffic,<br>1868. | Dividends.                             |
|----|------------------------|---------|---------|------------------------|--------------------------------|----------------------------------------|
|    |                        | Ft. In. | Ft. In. | £                      | Tons.                          |                                        |
| 1  | 1                      | ..      | 5 0     | 191,420                | ..                             | Leased—Annual rent 5 per cent.         |
| 2  | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 3  | 26                     | 102 3   | ..      | 184,410                | 529,416                        |                                        |
| 4  | 1                      | ..      | ..      | None.                  | 110,329                        |                                        |
| 5  | 7                      | ..      | ..      | 186,000                | 349,393                        |                                        |
| 6  | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 7  | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 8  | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 9  | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 10 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 11 | ..                     | ..      | ..      | ..                     | ..                             | 1868, 5 per cent.                      |
| 12 | 15                     | ..      | 123 9   | ..                     | ..                             |                                        |
| 13 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 14 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 15 | 15                     | 59 7    | ..      | 54,800                 | 255,313                        |                                        |
| 16 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 17 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 18 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 19 | ..                     | ..      | ..      | ..                     | 85,134                         |                                        |
| 20 | 33                     | ..      | ..      | 277,000                | ..                             |                                        |
| 21 | ..                     | ..      | ..      | ..                     | ..                             | 1833, 40 per cent ; 1842, 25 per cent. |
| 22 | 4                      | ..      | ..      | 37,700                 | 259,539                        |                                        |
| 23 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 24 | ..                     | ..      | ..      | 141,000                | ..                             |                                        |
| 25 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 26 | 5                      | ..      | ..      | ..                     | ..                             |                                        |
| 27 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 28 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 29 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 30 | 20                     | ..      | 132 10  | ..                     | ..                             |                                        |
| 31 | ..                     | ..      | ..      | ..                     | ..                             | 1833, 23 per cent ; 1842, 26 per cent. |
| 32 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 33 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 34 | 11                     | ..      | 50 0    | ..                     | ..                             |                                        |
| 35 | 11                     | ..      | ..      | 50,000                 | ..                             |                                        |
| 36 | 8                      | ..      | 45 1    | ..                     | ..                             |                                        |
| 37 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 38 | 16                     | ..      | 92 3    | ..                     | ..                             |                                        |
| 39 | ..                     | ..      | ..      | 1,000                  | 39,539                         |                                        |
| 40 | ..                     | 102 5   | ..      | 30,000                 | ..                             |                                        |
| 41 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 42 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 43 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 44 | ..                     | ..      | ..      | ..                     | ..                             |                                        |
| 45 | ..                     | ..      | ..      | ..                     | ..                             |                                        |

(e) TABULAR STATEMENT ILLUSTRATING THE GROWTH OF THE INLAND NAVIGATION SYSTEM  
DIMENSIONS, AMOUNT OF CAPITAL, TRAFFIC, AND

| Name of Waterway.                                 | Date of Act. | Length.   | DIMENSIONS OF LOCKS. |              |         |    |
|---------------------------------------------------|--------------|-----------|----------------------|--------------|---------|----|
|                                                   |              |           | Length.              | Width.       | Depth.  |    |
|                                                   |              | Mls. Fur. | Ft. In.              | Ft. In.      | Ft. In. |    |
| Sankey Brook Navigation (Lancashire) .....        | 1755         | 12 0      | 65 0                 | 16 9         | ..      | 1  |
| Ivel River (Bedford) .....                        | 1757         | 11 0      | ..                   | ..           | ..      | 2  |
| Blyth River (Suffolk) .....                       | 1757         | 9 0       | ..                   | ..           | ..      | 3  |
| Calder and Hebble Navigation .....                | 1758         | 22 0      | 53 0                 | 14 2         | 5 6     | 4  |
| Stort River (Hertford and Essex) .....            | 1759         | 13 4      | 100 0                | 13 6         | ..      | 5  |
| Duke of Bridgewater's Canal (Manchester) ....     | 1759         | 39 6      | 73 0                 | 14 2         | 4 6     | 6  |
| Loughborough Canal .....                          | 1766         | 8 4       | 70 0                 | 14 6         | 3 6     | 7  |
| Louth Canal (Lincoln) .....                       | 1766         | 12 0      | 87 6                 | 15 5         | ..      | 8  |
| Trent and Mersey Canal .....                      | 1766         | 89 0      | 72 0                 | 7 0          | 3 6     | 9  |
| Staffordshire and Worcestershire Canal .....      | 1766         | 50 0      | 72 0                 | 7 0          | 4 0     | 10 |
| Kidwelly Canal (Carmarthenshire) .....            | 1766         | 3 4       | ..                   | ..           | ..      | 11 |
| Chelmer and Blackwater Navigation .....           | 1766         | 14 0      | ..                   | ..           | ..      | 12 |
| Ancholme River Navigation .....                   | 1767         | 19 4      | ..                   | ..           | ..      | 13 |
| Birmingham Canal Navigations .....                | 1768         | 169 0     | 72 0                 | 7 0          | 4 0     | 14 |
| Coventry Canal (Warwick) .....                    | 1768         | 32 4      | 72 0                 | 7 0          | 4 0     | 15 |
| Droitwich Canal (Worcester).....                  | 1768         | 5 4       | 82 0                 | 14 6         | ..      | 16 |
| Oxford Canal (Oxford and Warwick) .....           | 1769         | 91 2      | 72 0                 | 7 0          | 4 0     | 17 |
| Leeds and Liverpool Canal .....                   | 1770         | 143 4     | 76 0<br>66 0         | 15 2<br>15 2 | 4 0     | 18 |
| Chesterfield Canal (Notts., Yorks., and Derby) .. | 1771         | 46 0      | 71 0                 | 6 10         | ..      | 19 |
| Bradford Canal (Yorkshire) .....                  | 1771         | 3 0       | ..                   | ..           | ..      | 20 |
| Ellesmere and Chester Canal .....                 | 1772         | 90 0      | 64 0                 | 14 7         | 4 0     | 21 |
| Market Weighton Canal.....                        | 1772         | 11 0      | ..                   | ..           | ..      | 22 |
| Bure River (Norfolk) .....                        | 1773         | 9 0       | ..                   | ..           | ..      | 23 |
| Thanet Canal (Yorkshire) .....                    | 1773         | 0 3       | ..                   | ..           | ..      | 24 |
| St Columb Canal (Cornwall) .....                  | 1773         | 6 0       | ..                   | ..           | ..      | 25 |
| Sir John Ramsden's Canal (Yorkshire) .....        | 1774         | 3 6       | 53 0                 | 14 2         | 4 6     | 26 |
| Bude Canal (Glamorganshire) .....                 | 1774         | 35 4      | ..                   | ..           | ..      | 27 |
| Sir Nigel Gresley's Canal (Stafford).....         | 1775         | 9 0       | ..                   | ..           | ..      | 28 |
| Dudley Canal (Stafford and Worcester) .....       | 1776         | 13 0      | 71 0                 | 7 0          | ..      | 29 |
| Stourbridge Canal .....                           | 1776         | 7 1½      | 71 0                 | 7 0          | ..      | 30 |
| Erewash Canal (Derby and Nottinghamshire) ..      | 1777         | 11 6      | 72 6                 | 14 6         | ..      | 31 |
| Basingstoke Canal (Hants) .....                   | 1778         | 37 0      | 72 6                 | 14 0         | ..      | 32 |
| Bourne Eau River (Lincoln) .....                  | 1781         | 3 4       | ..                   | ..           | ..      | 33 |
| Thames and Severn Canal.....                      | 1783         | 30 0      | 86 0<br>72 0         | 17 6<br>12 3 | ..      | 34 |
| Arun River Navigation (Sussex) .....              | 1785         | 13 0      | 78 0                 | 12 0         | ..      | 35 |
| Shropshire Canal.....                             | 1788         | 7 4       | ..                   | ..           | ..      | 36 |
| Andover Canal (Hants) .....                       | 1789         | 22 4      | 65 0                 | 8 6          | ..      | 37 |
| Cromford Canal (Nottinghamshire and Derby) ..     | 1789         | 18 0      | 80 0                 | 7 2          | ..      | 38 |
| Glamorganshire Canal .....                        | 1790         | 25 0      | 67 0                 | 10 6         | ..      | 39 |
| Gippen River (Suffolk) .....                      | 1790         | 16 0      | 76 0                 | 14 6         | ..      | 40 |
| Epping River .....                                | 1790         | ..        | ..                   | ..           | ..      | 41 |
| Ouse River (Sussex) .....                         | 1790         | 30 0      | 48 0                 | 13 3         | ..      | 42 |
| Rother River (Sussex) .....                       | 1791         | 11 0      | ..                   | ..           | ..      | 43 |
| Leicester and Melton Mowbray Navigation ....      | 1791         | 11 0      | 70 0                 | 14 6         | ..      | 44 |

OF ENGLAND AND WALES, WITH PARTICULARS OF THE DATES OF AUTHORISATION, THE  
EARNINGS OF THE RESPECTIVE WATERWAYS.—*Continued.*

|    | Number<br>of<br>Locks. | Rise.   | Fall.   | Authorised<br>Capital. | Volume<br>of Traffic,<br>1868. | Dividends.                                                  |
|----|------------------------|---------|---------|------------------------|--------------------------------|-------------------------------------------------------------|
|    |                        | Ft. In. | Ft. In. | £                      | Tons.                          |                                                             |
| 1  | 11                     | 91 5    | ..      | ..                     | ..                             |                                                             |
| 2  | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 3  | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 4  | 26                     | ..      | 188 5   | ..                     | ..                             |                                                             |
| 5  | 15                     | ..      | 95 0    | 40,000                 | 54,064                         |                                                             |
| 6  | 11                     | 82 0    | ..      | ..                     | ..                             | (See "c" section "i.")                                      |
| 7  | 6                      | ..      | 41 0    | 10,000                 | ..                             | 1833, 124 per cent; 1842, 84 per cent.                      |
| 8  | 8                      | ..      | 50 8    | 60,915                 | 28,000                         |                                                             |
| 9  | 91                     | ..      | ..      | 1,170,000              | 1,494,524                      | 1833, 37½ per cent; 1842, 32½ per cent.                     |
| 10 | 53                     | 44 0    | 394 2   | 390,595                | 798,780                        | 1833, 34 per cent; 1842, 36 per cent;<br>1885, 5 per cent.  |
| 11 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 12 | 9                      | ..      | ..      | 40,000                 | 43,294                         | 1833, 5 per cent; 1842, 5 per cent.                         |
| 13 | 2                      | ..      | ..      | ..                     | ..                             |                                                             |
| 14 | 223                    | 132 0   | 85 1    | 3,208,375              | 6,982,773                      | 1833, 12½ per cent; 1842, 10 per cent.                      |
| 15 | 13                     | ..      | ..      | 50,000                 | 427,808                        | 1833, 32 per cent; 1842, 20 per cent.                       |
| 16 | 8                      | ..      | ..      | 20,000                 | 17,326                         | 1885, 8 per cent.                                           |
| 17 | 46                     | ..      | ..      | 178,000                | 482,000                        | 1833, 32 per cent; 1842, 30 per cent;<br>1884, 7½ per cent. |
| 18 | 94                     | 436 9   | 412 8   | 401,865                | 2,141,151                      | 1833, 20 per cent; 1842, 34 per cent.                       |
| 19 | 65                     | 72 5    | 257 3   | ..                     | ..                             | 1833, 8 per cent.                                           |
| 20 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 21 | 50                     | 296 10  | 48 0    | 475,575                | ..                             | 1833, 3¼ per cent; 1842, 4 per cent.                        |
| 22 | 2                      | ..      | ..      | ..                     | ..                             |                                                             |
| 23 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 24 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 25 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 26 | 10                     | 57 4    | ..      | ..                     | ..                             |                                                             |
| 27 | ..                     | ..      | ..      | 92,367                 | 53,103                         | 1884, 5¼ per cent.                                          |
| 28 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 29 | 14                     | 116 2   | ..      | ..                     | ..                             |                                                             |
| 30 | 20                     | 182 0   | ..      | 43,500                 | ..                             | 1833, 9 per cent; 1842, 20 per cent.                        |
| 31 | 14                     | 104 7   | ..      | 23,100                 | ..                             | 1833, 47 per cent; 1842, 62 per cent.                       |
| 32 | 29                     | 194 2   | ..      | 126,000                | 23,521                         | 1833, £100 selling for £5. 5s.                              |
| 33 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 34 | 44                     | ..      | ..      | 245,000                | 51,407                         | 1833, £1. 10s. per cent; 1842, 2 per cent.                  |
| 35 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 36 | ..                     | ..      | 179 0   | 62,500                 | ..                             | 1833, 7½ per cent; 1842, 8 per cent.                        |
| 37 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 38 | 51                     | ..      | 548 3   | 46,000                 | ..                             | 1833, 18 per cent; 1842, 24 per cent.                       |
| 39 | ..                     | ..      | ..      | 103,600                | ..                             | 1833, 13½ per cent; 1842, 13⅝ per cent.                     |
| 40 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 41 | ..                     | ..      | ..      | ..                     | ..                             |                                                             |
| 42 | 19                     | 136 8½  | ..      | ..                     | ..                             |                                                             |
| 43 | 8                      | 54 0    | ..      | ..                     | ..                             |                                                             |
| 44 | 12                     | 71 2    | ..      | ..                     | ..                             |                                                             |



(e) TABULAR STATEMENT ILLUSTRATING THE GROWTH OF THE INLAND NAVIGATION SYSTEM  
DIMENSIONS, AMOUNT OF CAPITAL, TRAFFIC, AND

| Name of Waterway.]                              | Date of Act. | Length. | DIMENSIONS OF LOCKS. |         |         |         |
|-------------------------------------------------|--------------|---------|----------------------|---------|---------|---------|
|                                                 |              |         | Length.              |         | Width.  | Depth.  |
|                                                 |              |         | Mls. Fur.            | Ft. In. | Ft. In. | Ft. In. |
| Hereford and Gloucester Canal .....             | 1791         | 35 4    | 73 0                 | 8 0     | ..      | 1       |
| Leominster Canal (Hereford and Worcester) ....  | 1791         | 46 0    | ..                   | ..      | ..      | 2       |
| Leicester Canal .....                           | 1791         | 16 0    | 70 0                 | 14 6    | 3 6     | 3       |
| Manchester, Bolton, and Bury Canal .....        | 1791         | 16 0    | 68 0                 | 15 0    | ..      | 5       |
| Neath Canal (Glamorgan) .....                   | 1791         | 14 0    | ..                   | ..      | ..      | 1       |
| Worcester and Birmingham .....                  | 1791         | 29 0    | 80 0                 | 7 6     | ..      | 6       |
| Horncastle Navigation (Lincoln) .....           | 1792         | 11 0    | ..                   | ..      | ..      | 7       |
| Coombe Hill Canal (Gloucestershire) .....       | 1792         | 3 4     | 72 0                 | 14 0    | ..      | 8       |
| Lancaster Canal .....                           | 1792         | 57 0    | 72 0                 | 14 6    | ..      | 9       |
| Monmouthshire Canal .....                       | 1792         | 20 0    | 68 6                 | 10 0    | 10 0    | 10      |
| Nottingham Canal .....                          | 1792         | 15 0    | 91 0                 | 14 6    | ..      | 11      |
| Wyrley and Essington Canal (Staffordshire) .... | 1792         | 24 0    | 71 0                 | 7 0     | ..      | 12      |
| Foss Navigation (Yorkshire) .....               | 1793         | 12 4    | ..                   | ..      | ..      | 13      |
| Ashton-under-Lyne Canal .....                   | 1793         | 17 4    | 83 0                 | 8 9     | 4 6     | 14      |
| Barnsley Canal (Yorkshire) .....                | 1793         | 15 0    | 53 0                 | 14 3    | ..      | 15      |
| Brecknock and Abergavenny Canal .....           | 1793         | 33 0    | 68 6                 | 10 0    | ..      | 16      |
| Caistor Canal (Lincoln) .....                   | 1793         | 4 0     | ..                   | ..      | ..      | 17      |
| Dearne and Dove Canal (Yorkshire) .....         | 1793         | 14 0    | 57 0                 | 15 0    | ..      | 18      |
| Derby Canal .....                               | 1793         | 18 0    | 90 0                 | 14 6    | ..      | 19      |
| Gloucester and Berkeley Canal .....             | 1793         | 16 4    | 163 0                | 29 6    | ..      | 20      |
| Grand Junction Canal .....                      | 1793         | 135 0   | 81 6                 | 14 0    | 4 6     | 21      |
| Grantham Canal (Nottinghamshire, &c.) .....     | 1793         | 33 6    | 72 6                 | 14 6    | ..      | 22      |
| Leicester and Northampton Canal .....           | 1793         | 24 0    | 88 0                 | 15 6    | 3 6     | 23      |
| Oakham Canal (Leicester) .....                  | 1793         | 8 0     | 72 0                 | 14 6    | ..      | 24      |
| Shipley Collieries Canal (Yorkshire) .....      | 1793         | 4 4     | 72 6                 | 14 6    | ..      | 25      |
| Shrewsbury Canal .....                          | 1793         | 17 4    | 71 0                 | 7 0     | ..      | 26      |
| Stainforth and Keadby Canal .....               | 1793         | 13 0    | 68 0                 | 17 6    | ..      | 27      |
| Stratford-upon-Avon Canal .....                 | 1793         | 25 2    | 71 0                 | 7 0     | 4 0     | 28      |
| Ulverstone Canal (Lancashire) .....             | 1793         | 1 2     | ..                   | ..      | ..      | 29      |
| Warwick and Birmingham Canal .....              | 1793         | 22 2    | 71 0                 | 7 0     | 4 0     | 30      |
| Wisbeach Canal .....                            | 1794         | 5 2     | 54 0                 | 14 0    | ..      | 31      |
| Ashby-de-la-Zouch Canal .....                   | 1794         | 26 4    | 71 0                 | 7 0     | 4 6     | 32      |
| Huddersfield Canal .....                        | 1794         | 20 0    | 70 0                 | 7 0     | ..      | 33      |
| Kennet and Avon Canal .....                     | 1794         | 57 0    | 120 0                | 18 0    | ..      | 34      |
| Sleaford Navigation (Lincolnshire) .....        | 1794         | 13 4    | 60 0                 | 15 0    | ..      | 35      |
| Montgomeryshire Canal .....                     | 1794         | 27 0    | ..                   | ..      | ..      | 36      |
| Peak Forest Canal .....                         | 1794         | 15 0    | 70 0                 | 7 0     | ..      | 37      |
| Rochdale Canal (Lancashire and Yorkshire) ....  | 1794         | 35 0    | 73 0                 | 14 2    | 4 6     | 38      |
| Somersetshire Coal Canal .....                  | 1794         | 11 0    | 70 0                 | 8 0     | ..      | 39      |
| Swansea Canal .....                             | 1794         | 17 0    | ..                   | ..      | ..      | 40      |
| Warwick and Napton Canal .....                  | 1794         | 14 4    | 71 0                 | 7 0     | 4 0     | 41      |
| Llchester and Langport Canal (Somersetshire) .. | 1795         | 7 0     | ..                   | ..      | ..      | 42      |
| Newcastle-under-Lyme Canal (Staffordshire) .... | 1795         | 3 0     | No                   | Locks.  | ..      | 43      |

OF ENGLAND AND WALES, WITH PARTICULARS OF THE DATES OF AUTHORISATION, THE EARNINGS OF THE RESPECTIVE WATERWAYS.—*Continued.*

|    | Number<br>of<br>Locks. | Rise.   | Fall.   | Authorised<br>Capital. | Volume<br>of Traffic,<br>1868. | Dividends.                                             |
|----|------------------------|---------|---------|------------------------|--------------------------------|--------------------------------------------------------|
|    |                        | Ft. In. | Ft. In. | £                      | Tons.                          |                                                        |
| 1  | ..                     | ..      | ..      | 172,390                | ..                             |                                                        |
| 2  | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 3  | 10                     | ..      | 50 0    | 84,000                 | 98,329                         | 1833, 10 per cent; 1842, 11 per cent.                  |
| 4  | 18                     | 182 0   | ..      | ..                     | ..                             | 1833, 6 per cent.                                      |
| 5  | ..                     | ..      | ..      | 24,700                 | ..                             | 1833, 15 per cent; 1842, 20 per cent.                  |
| 6  | 58                     | ..      | 424 5   | 470,400                | ..                             | 1833, 4 per cent; 1842, 4 per cent.                    |
| 7  | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 8  | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 9  | ..                     | 72 0    | 228 0   | 570,144                | ..                             | 1833, 1 per cent; 1842, 1½ per cent.                   |
| 10 | 68                     | ..      | ..      | 598,903                | No record.                     | 1833, 10 per cent; 1842, 10 per cent.                  |
| 11 | 19                     | ..      | ..      | 75,000                 | 198,812                        | 1833, 12 per cent.                                     |
| 12 | 30                     | 264 10  | ..      | ..                     | ..                             |                                                        |
| 13 | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 14 | 26                     | 150 7   | ..      | 186,326                | ..                             | 1833, 5 per cent; 1842, 6 per cent.                    |
| 15 | 21                     | 157 8   | ..      | 115,200                | ..                             | 1833, 14 per cent; 1842, 14 per cent.                  |
| 16 | ..                     | ..      | ..      | ..                     | ..                             | 1833, 4 per cent; 1842, 5½ per cent.                   |
| 17 | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 18 | 25                     | ..      | ..      | 54,950                 | 776,393                        |                                                        |
| 19 | 14                     | ..      | 84 0    | 90,000                 | ..                             | 1833, 6 per cent; 1842, 9 per cent.                    |
| 20 | 2                      | ..      | ..      | 500,000                | ..                             | 1833, £100 selling for £13. 10s.                       |
| 21 | 118                    | 194 3   | 503 6   | 1,130,000              | ..                             | 1833, 7 per cent; 1842, 12 per cent; 1885, 4 per cent. |
| 22 | 18                     | 139 9   | ..      | 112,350                | ..                             | 1833, 10 per cent; 1842, 12 per cent.                  |
| 23 | 25                     | ..      | 150 0   | 167,167                | ..                             | 1833, 4 per cent; 1842, 2½ per cent.                   |
| 24 | ..                     | ..      | ..      | 67,860                 | ..                             | 1833, 2 per cent.                                      |
| 25 | 13                     | 84 2    | ..      | ..                     | ..                             |                                                        |
| 26 | 11                     | 154 0   | ..      | 62,500                 | ..                             | 1833, 11 per cent; 1842, 15 per cent.                  |
| 27 | 2                      | ..      | 15 0    | ..                     | ..                             |                                                        |
| 28 | 54                     | ..      | 340 8   | 332,014                | 95,439                         | 1833, 1½ per cent; 1842, 2 per cent.                   |
| 29 | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 30 | 33                     | 42 0    | 188 0   | 150,000                | 259,538                        | 1833, 16 per cent; 1842, 14½ per cent.                 |
| 31 | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 32 | ..                     | ..      | ..      | 167,466                | ..                             | 1833, 4 per cent; 1842, 4 per cent.                    |
| 33 | 74                     | 334 8   | 435 0   | 357,593                | ..                             | 1833, 1½ per cent; 1842, 2 per cent.                   |
| 34 | 79                     | ..      | ..      | 1,011,643              | ..                             | 1833, 1½ per cent; 1842, 1½ per cent.                  |
| 35 | 7                      | ..      | 33 3    | ..                     | ..                             |                                                        |
| 36 | ..                     | ..      | ..      | 70,000                 | ..                             | 1833, 4 per cent; 1842, 4½ per cent.                   |
| 37 | 16                     | 211 0   | ..      | 263,652                | ..                             | 1833, 3½ per cent; 1842, 4 per cent.                   |
| 38 | 63                     | 517 0   | 353 7   | 481,355                | ..                             | 1833, 4½ per cent; 1842, 5 per cent.                   |
| 39 | 22                     | 130 7   | ..      | 120,000                | 140,112                        | 1833, 10½ per cent; 1842, 8½ per cent.                 |
| 40 | ..                     | ..      | ..      | 53,300                 | ..                             | 1833, 12 per cent; 1842, 15 per cent.                  |
| 41 | 25                     | 145 10  | 13 4    | 98,000                 | 212,948                        | 1833, 12 per cent; 1842, 10 per cent.                  |
| 42 | ..                     | ..      | ..      | ..                     | ..                             |                                                        |
| 43 | ..                     | ..      | ..      | ..                     | ..                             |                                                        |



(e) TABULAR STATEMENT ILLUSTRATING THE GROWTH OF THE INLAND NAVIGATION SYSTEM  
DIMENSIONS, AMOUNT OF CAPITAL, TRAFFIC, AND

| Name of Waterway.                               | Date<br>of<br>Act. | Length.   | DIMENSIONS OF LOCKS. |         |         |    |
|-------------------------------------------------|--------------------|-----------|----------------------|---------|---------|----|
|                                                 |                    |           | Length.              | Width.  | Depth.  |    |
|                                                 |                    | Mls. Fur. | Ft. In.              | Ft. In. | Ft. In. |    |
| Salisbury and Southampton Canal .....           | 1795               | ..        | ..                   | ..      | ..      | 1  |
| Wiltshire and Berkshire Canal .....             | 1795               | 60 2      | 78 0                 | 8 0     | ..      | 2  |
| Grand Western Canal (Somerset and Devon)....    | 1796               | 12 0      | ..                   | ..      | ..      | 3  |
| Tamar Manure Navigation (Devon and Cornwall)    | 1797               | 22 0      | ..                   | ..      | ..      | 4  |
| Newcastle-under-Lyme Junction Canal .....       | 1798               | 2 0       | ..                   | ..      | ..      | 5  |
| Croydon Canal (Kent and Surrey) .....           | 1801               | 9 4       | 60 0                 | 9 0     | ..      | 6  |
| Grand Surrey Canal .....                        | 1801               | 4 4       | ..                   | ..      | ..      | 7  |
| Leven Canal (Yorkshire) .....                   | 1801               | 3 0       | 72 0                 | 17 0    | ..      | 8  |
| Axe River (Somerset) .....                      | 1802               | 9 0       | ..                   | ..      | ..      | 9  |
| Tavistock Canal (Devon) .....                   | 1803               | 4 0       | 74 0                 | 8 0     | ..      | 10 |
| Ribble Navigation (Lancashire) .....            | 1806               | 11 0      | No                   | Locks.  | ..      | 11 |
| Adur River (Sussex) .....                       | 1807               | 11 0      | ..                   | ..      | ..      | 12 |
| Isle of Dogs Canal (Middlesex) .....            | 1807               | 0 6       | ..                   | ..      | ..      | 13 |
| Royal Military Canal (Kent and Sussex).....     | 1807               | 30 0      | ..                   | ..      | ..      | 14 |
| Tees Navigation (Durham) .....                  | 1808               | 12 0      | ..                   | ..      | ..      | 15 |
| Severn and Wye Canal .....                      | 1809               | 13 2      | ..                   | ..      | ..      | 16 |
| Grand Union Canal (Leicester and Northampton)   | 1810               | 45 0      | 71 0                 | 7 0     | ..      | 17 |
| Bridgewater and Taunton Canal .....             | 1811               | 15 2      | 60 0                 | 13 9    | ..      | 18 |
| Penclawdd Canal (Glamorgan) .....               | 1811               | 4 0       | ..                   | ..      | ..      | 19 |
| London and Cambridge Canal .....                | 1812               | 28 2      | ..                   | ..      | ..      | 20 |
| North Walsham and Dilham Canal .....            | 1812               | 7 4       | ..                   | ..      | ..      | 21 |
| Regent's Canal (Middlesex) .....                | 1812               | 8 4       | 86 0                 | 14 6    | 5 0     | 22 |
| Bury, Loughor, and Lliedi Rivers (South Wales). | 1813               | 14 0      | ..                   | ..      | ..      | 23 |
| North Wiltshire Canal .....                     | 1813               | 8 6       | 74 0                 | 7 6     | ..      | 24 |
| Wey and Arun Junction Canal.....                | 1813               | 18 0      | ..                   | ..      | ..      | 25 |
| Newport Pagnell Canal (Buckinghamshire).....    | 1814               | 1 2       | 71 0                 | 7 0     | ..      | 26 |
| Pocklington Canal (Yorkshire) .....             | 1815               | 8 4       | 60 6                 | 15 0    | ..      | 27 |
| Sheffield Canal.....                            | 1815               | 4 0       | 53 0                 | 15 2    | ..      | 28 |
| Portsmouth and Arundel Canal .....              | 1817               | 13 2      | 90 0                 | 18 6    | }       | 29 |
|                                                 |                    |           | 75 0                 | 12 6    |         |    |
| Carlisle Canal .....                            | 1819               | 11 2      | ..                   | ..      | ..      | 30 |
| Hertford Union Canal .....                      | 1824               | 1 2       | ..                   | ..      | ..      | 31 |
| Liskeard and Looe Canal (Cornwall) .....        | 1825               | 5 7       | ..                   | ..      | ..      | 32 |
| Baybridge Canal (Sussex).....                   | 1825               | 3 3       | ..                   | ..      | ..      | 33 |
| Pembrey Canal (Carmarthen) .....                | 1825               | 0 4       | ..                   | ..      | ..      | 34 |
| English and Bristol Channels Ship Canal .....   | 1825               | 44 5      | ..                   | ..      | 15 0    | 35 |
| Macclesfield Canal (Chester).....               | 1826               | 26 2      | 82 0                 | 7 3     | 10 0    | 36 |
| Birmingham and Liverpool Junction Canal ....    | 1826               | 39 0      | 82 0                 | 7 6     | ..      | 37 |
| Alford Canal (Lincoln) .....                    | 1826               | 6 4       | ..                   | ..      | ..      | 38 |
| Glastonbury Navigation.....                     | 1827               | 14 0      | ..                   | ..      | ..      | 39 |
| Norwich and Lowestoft Navigation .....          | 1827               | 30 0      | 84 0                 | 21 0    | 10 0    | 40 |
| Ouse and Larke Rivers .....                     | 1827               | ..        | ..                   | ..      | ..      | 41 |
| Great Ouse River (Bedford) .....                | 1830               | 61 2      | ..                   | ..      | ..      | 42 |
| Bute Ship Canal (Glamorgan) .....               | 1830               | 2 4       | ..                   | ..      | ..      | 43 |
| Manchester and Salford Junction Canal.....      | 1836               | 0 5       | 73 0                 | 14 2    | 4 6     | 44 |
| Droitwich Junction Canal .....                  | 1852               | 1 2       | 82 0                 | 15 0    | ..      | 45 |
| Manchester Ship Canal .....                     | 1885               | 35 0      | 600 0                | 80 0    | 26 0    | 46 |



OF ENGLAND AND WALES, WITH PARTICULARS OF THE DATES OF AUTHORISATION, THE  
EARNINGS OF THE RESPECTIVE WATERWAYS.—*Continued.*

|    | Number<br>of<br>Locks. | Rise.   | Fall.   | Authorised<br>Capital. | Volume<br>of Traffic,<br>1868. | Dividends.                                       |
|----|------------------------|---------|---------|------------------------|--------------------------------|--------------------------------------------------|
|    |                        | Ft. In. | Ft. In. | £                      | Tons.                          |                                                  |
| 1  | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 2  | 57                     | ..      | ..      | 337,600                | 41,902                         | 1833, 5s. per cent; 1842, £1. 16s. per cent.     |
| 3  | ..                     | ..      | ..      | 309,600                | ..                             | 1833, £100 selling for £21.                      |
| 4  | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 5  | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 6  | 28                     | 167 0   | ..      | 454,600                | ..                             |                                                  |
| 7  | ..                     | ..      | ..      | 150,000                | ..                             |                                                  |
| 8  | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 9  | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 10 | ..                     | ..      | ..      | 35,000                 | ..                             | 1833, 2 per cent.                                |
| 11 | ..                     | ..      | ..      | 179,500                | ..                             |                                                  |
| 12 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 13 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 14 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 15 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 16 | ..                     | ..      | ..      | ..                     | ..                             | 1842, £2. 12s. per cent.                         |
| 17 | 17                     | 54 0    | 76 0    | 278,600                | ..                             | 1842, 1½ per cent.                               |
| 18 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 19 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 20 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 21 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 22 | 13                     | ..      | 80 6    | 1,181,081              | 1,633,098                      | 1833, 13s. 6d. per cent; 1842, 5s. 6d. per cent. |
| 23 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 24 | 11                     | 1 2     | 57 2    | ..                     | ..                             |                                                  |
| 25 | ..                     | ..      | ..      | 99,550                 | ..                             | 1833, £110 selling for £33; 1842, 1 per cent.    |
| 26 | 7                      | ..      | 51 6    | ..                     | ..                             |                                                  |
| 27 | 9                      | ..      | 101 3   | ..                     | ..                             |                                                  |
| 28 | 12                     | ..      | 70 1    | ..                     | ..                             |                                                  |
| 29 | 4                      | 21 0    | 20 0    | ..                     | ..                             |                                                  |
| 30 | 9                      | ..      | 70 0    | ..                     | ..                             |                                                  |
| 31 | 3                      | ..      | 26 0    | ..                     | ..                             |                                                  |
| 32 | 25                     | ..      | 156 0   | ..                     | ..                             |                                                  |
| 33 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 34 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 35 | 58                     | 245 0   | 267 7   | 2,500,000              | ..                             |                                                  |
| 36 | 12                     | ..      | ..      | 400,000                | 206,329                        | 1842, 1½ per cent.                               |
| 37 | 26                     | 176 9   | ..      | 400,000                | ..                             |                                                  |
| 38 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 39 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 40 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 41 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 42 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 43 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 44 | ..                     | ..      | ..      | ..                     | ..                             |                                                  |
| 45 | ..                     | ..      | ..      | 24,000                 | ..                             | 5 per cent guaranteed.                           |
| 46 | 5 (sets)               | ..      | 61 0    | 9,812,000              | ..                             |                                                  |

## INLAND NAVIGATION.

this connection the enterprising Duke of Bridgewater and his famous engineer, James Brindley, deserve special mention, for it was the resources of the duke and the skill of Brindley which commenced a new epoch in the development of inland navigation in England. Besides the great saving effected to domestic consumers of coal by the cheapness made possible by the Bridgewater Canal, it also provided the cheap fuel upon which, through the genius of James Watt in perfecting the steam engine, the future of the cotton manufacture was soon afterwards seen to depend. The Runcorn section of the Bridgewater Canal also provided to the cotton district, of which Manchester is the great emporium, cheap facilities for the carriage of its raw materials from the sea-board and of its manufactures to the sea-board. In 1756 the population of Manchester and Salford was computed to be 19,839 persons. The Worsley section of the Bridgewater Canal was opened in 1762, and the Runcorn section in 1776. The completion of canals between 1776 and 1805 gave Manchester, in addition to the water communication with Warrington, Runcorn, and Liverpool, also connected her by inland navigation with the sister towns of Bolton, Bury, Ashton, Oldham, and Rochdale, also with Littleborough, Todmorden, Hebden Bridge, and Sowerby Bridge, and gave her access to the through routes between Liverpool and the other great ports of London, Hull, and Bristol. The increase of the population of Manchester and Salford from 20,000 in 1756 to 183,000 in 1821, was mainly rendered possible by the facilities afforded to production and distribution by the provision of inland navigation. Taking the population of Manchester and Salford and their immediate suburbs to 1831, it had increased to 284,000. This date is given as being virtually co-incident with the practical inception of the English railway system, by the opening of the first Liverpool and Manchester Railway in 1830.

As the principal developments of inland navigation in England and Wales during the second half of the eighteenth century, as already stated, the statistics of the growth of the population, foreign trade and ocean navigation between 1801 and 1831 will form good *criteria* as to the national progress in which it can be fairly claimed that our inland waterways materially assisted. Between 1801 and 1831 the population of England and Wales increased from 8,873,000 to 13,895,000, the ratio being 56·5 per cent. The foreign trade of the United Kingdom in 1801\* amounted to £67,000,000, and in 1831 to £121,000,000, the rate of increase being 44·6 per cent. The aggregate tonnage of vessels belonging to the United Kingdom increased from 1,786,000 tons in 1801 to 2,240,000 tons in 1831, the increase being 25·5 per cent. The aggregate tonnage of shipping entering and clearing to and from the ports of the United Kingdom in 1801 was 3,856,000 tons. In 1831 the volume of tonnage was 6,439,000, showing an increase of 66·9 per cent.

Our inland navigation system, as regards mileage, attained its maximum about 1830. At that time there were in England and Wales about 1,800 miles of improved river navigation and open estuaries, and about 2,200 miles of navigable canals, the total being 4,000 miles of inland navigation.

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\* These figures represent what were known as "official" values, which are somewhat different from the real value. It is only since 1854 that comparisons of real value can be made.



## INLAND NAVIGATION.

## (f) HALF A CENTURY OF NATIONAL NEGLECT OF INLAND NAVIGATION.

IN view of the enormous expansion of our manufactures and commerce during the last half century, it is a remarkable paradox to find, in spite of an ever-growing demand for increased means of communication, that there has been a diminution in the mileage of inland navigation in this country. The measure of this diminution exceeds 300 miles. Could there be a more forcible illustration of the national apathy with reference to inland navigation than the fact that no returns are required by the Board of Trade from the companies and trusts that have the control of our waterways, although the railway companies are compelled to make annual returns with regard to share and loan capital, traffic in passengers and goods, working expenses, gross income, net profits, and open mileage? The only retrospective statistics relating to the economy of inland navigation in England and Wales which have been issued by order of Parliament are contained in a return moved for by Mr. Dodds, M.P., on 22nd July, 1869, and ordered to be printed by the House of Commons on 26th April, 1870. The return is entitled "Navigation and Canal Companies." The particulars, so far as obtainable, show the date of the original authority for the various undertakings; traffic, revenue, and dividend for the years 1828, 1838, 1848, 1858, and 1868; amount of share and loan capital; length, dimensions of locks, source and quantity of water. This return contains a considerable amount of interesting information, but unfortunately its incompleteness prevents a summary of any of the particulars. Particulars were only received from seventy-one proprietary interests, although there are at least twice that number, and the mileage included is but 2,438 out of an ascertained aggregate length of 3,670 miles.

Another valuable store of information, throwing much light on the general neglect of inland navigation in England and Wales during the half century which has witnessed the growth of our magnificent railway system, is to be found in the report ordered by the House of Commons on 12th July, 1883, being the result of the inquiries of a Select Committee appointed to inquire "into the conditions and the position of the Canals and Internal Navigation of the Country, to report thereupon, and to make such recommendations as may appear necessary." The Committee stated that they had not concluded the investigation, but reported the evidence taken, and recommended that the Committee should be re-appointed in the next session of Parliament. The Committee has not been re-appointed, probably owing to the state of public business.

Although the Committee have in effect made no report and its object has not been gained, the minutes of evidence and a voluminous appendix which accompanies it are very instructive. The Committee consisted of eighteen members of Parliament, Mr. Thomas Salt presiding. It held eleven sittings, and examined twenty witnesses. No less than 3,692 questions were put to the witnesses.

The difficulty of getting accurate information regarding the economy of our inland navigation is well evidenced by the circumstance that three witnesses, all exceptionally well informed on the subject, materially differed in their respective statements of the total mileage of waterways in England and Wales. In the papers



## INLAND NAVIGATION.

handed in to the Select Committee on Canals in 1883, Mr. H. G. Calcraft, Assistant-Secretary to the Railway Department of the Board of Trade, handed in a statement giving the mileage of inland navigation in England and Wales as 2,688, exclusive of the Rivers Thames, Severn, Wye, Humber, Wear, and Tyne. The navigable portions of these rivers amount in the aggregate to about 400 miles. Mr. J. H. Taunton, C.E., engineer and manager of the Thames and Severn Canals, stated in the paper he handed in that the total length is 3,714 miles. Mr. E. J. Lloyd, C.E., engineer, manager, and secretary of the Warwick Canals, gives particulars the summary of which is 4,050 miles.

An analysis of the data furnished by the details of the foregoing statements shows that 1,690 miles of improved rivers and open estuaries, and 2,287 miles of navigable canals have been constructed in England and Wales, making an aggregate total of 3,978 miles. As, however, 188 miles have been abandoned, and 120 miles have been converted into railways, these diminutions have reduced the mileage of improved rivers to 1,580 miles, and that of canals to 2,090 miles, leaving 3,670 miles as the existing extent of inland navigation in this country.

*The Fortnightly Review*, in October, 1881, called attention to the indifference of this country to the improvement of its waterways, in these terms:—"What will it avail to do the carrying business of the world, and how long will that proud position be maintained, if our own trade begins to dwindle away from not having reaped in time, like other nations, the advantages of water carriage for the heavier commodities and the raw materials of our industries, and all the coincident gains from a railway system stimulated by active and sustained competition?"

In a memorial dated 31st March, 1882, addressed to the President of the Board of Trade by the Associated Chambers of Commerce, are the following passages:—"If the suggestion of the Joint Select Committee of both Houses of Parliament on Railway Amalgamation, 1872, be adopted, namely that Parliamentary encouragement be given to independent canal companies to exercise compulsory powers and re-purchase adjoining canals from railway companies, a grand and cheap system of water carriage might be created, especially if steam were largely used for towing."

"The canals are specially adapted for the conveyance of raw material and other heavy traffic, in which the time occupied is of comparatively little importance, a class of traffic which the railway companies admit is not profitable for them to work even at rates which would leave substantial profit to canal carriers if the tolls were fixed at a reasonable rate."

In 1882, the late Mr. Peter Spence, an extensive chemical manufacturer in Manchester and elsewhere, pointed out in an able pamphlet how the neglect and destruction of canals crippled British industry, and warned the public that "England cannot in the face of increasing foreign competition afford to see her cheapest means of internal transit, year after year, closed against traffic."

Mr. John Slagg, who is one of the representatives of the English Government on the directorate of the Suez Canal, in addressing the Manchester Chamber of Commerce, in April, 1882, observed:—"When we consider the enormous competition to which we are subjected by foreign nations, and the almost costless canal traffic in

France to every market and centre of industry, he thought we should see the necessity of bestirring ourselves to make the best possible use of similar advantages in this country."

In a "Memorandum on Canals," by Sir Arthur Cotton, which was handed in to the Select Committee on Canals, 1883, by its chairman, Mr. Salt, he observes:—"The important subject of internal water-carriage has for fifty years been so lost sight of in consequence of the new start given to land-carriage by the discovery of railways, that it is behind all other material matters in its development. In France they are so far aroused that they are spending many millions on putting their waterways on a totally different footing. . . . It is one of the most remarkable things in present progress, that while there is nothing in which such extraordinary improvement has been made as in ocean transit, internal water-carriage has been almost stationary. . . . A complete system of canals to connect all the great rivers, navigated by boats of 150 tons or so, worked when loaded at six or eight miles an hour, and when empty at ten miles, with a charge of one-twelfth of a penny per ton per mile, would give England an entirely new start all over the world in her trade."

In a "Memorandum on the Policy of Water-Carriage in England," which was handed in by Lieutenant-General Rundall, R.E., to the Select Committee on Canals, 1883, he remarks:—"It seems to me that in the attempt which has been made to draw comparisons between the efficiency of railways and canals, in their respective present conditions, the fact has been overlooked that that comparison is being drawn between two machines which exist under very dissimilar circumstances. It is like comparing a perfectly modelled mail steamer of the great ocean companies with the coal barges of the Thames. All such comparisons can only serve to obscure the real points to be arrived at, viz., the practicability of reducing the cost of carriage to the very lowest figure, and the necessity for doing so, if the mercantile interests of the United Kingdom are to hold their own in the competition with foreign nations."

*The Edinburgh Review*, in October, 1883, thus referred to the growing feeling in the public mind that our waterways were worthy of more attention than they had for a long time received:—"What at last awakened the industrial world, and that with a suddenness probably without example, was the fact that the English manufacturer finding himself unexpectedly undersold, not only in the foreign but even in the home market, betook himself to investigate the cause. That cause, he soon found, was that he paid in many cases twice as much for transport as did his Continental rival. In some natural indignation he demanded an account of this state of things at the hands of those who had monopolised the internal carrying trade of the country."

During the half century of neglect of our waterways, which we now have reason to regret, a remarkable combination of influences operated in bringing about an extraordinary expansion of our manufactures and commerce. The perfection of the steam engine, the fertility of our mechanical resources, the results of scientific research, our supplies of coal and iron, the removal from the statutes of measures



which restricted trade, and the improvement in the means of communication, all contributed in conferring those valuable advantages which have brought about our great prosperity. We have so rapidly grown in wealth that we have been somewhat unmindful, and, in some respects, too prodigal. The various pronouncements of opinion which have been quoted are of sufficient importance to establish that if we are to maintain the position we have attained, it depends entirely upon the keenest attention to every element in the cost of production. To lessen the cost of transit is to lessen an important element in the cost of production. To lessen the cost of transit is to increase the power of competition. The effects of transit charges in their incidence are precisely the same as those produced by the operation of hostile customs' tariff. Reduce transport charges and you extend your operations to markets otherwise closed against you.

(g) THE IMPROVEMENTS NECESSARY FOR THE CORRECTION OF THE  
DEFECTS OF OUR SYSTEM OF INLAND NAVIGATION.

*Insufficient Capacity.*—The volume of trade which existed at the period in which our system of inland navigation received its principal development was comparatively insignificant in relation to the magnitude of commerce to-day. As it was impossible to anticipate the enormous movement of commodities for which provision is now required, the capacity of most of the waterways is utterly inadequate. The dimensions were largely governed by the local requirements then existing, without reference to the function which might be discharged as links in a through system. Every canal engineer appears to have been allowed to give effect to his own notion of the depth and width and of the dimensions of the locks. Some of the canals were only intended for narrow, shallow boats, and only broad enough for the passage of one boat at a time, the passing of boats in opposite directions being effected at occasional side places termed lay-byes.

*Want of Uniformity.*—A serious impediment to the more effective use of our waterways arises from the want of a common gauge for the locks. This want of uniformity restricts the full measure of utility by preventing through communication, and involving transshipment charges as the inevitable outcome.

*Consolidation of Management.*—Traffic passing by inland water communication between London and Liverpool has to pass over the waterways of eight distinct proprietary interests. Each of these has its own special economy as regards traffic regulations and tolls. As a consequence, practically there is no through traffic by the inland water between the great ports of London and Liverpool. The constitution of a single administration for a great trunk route would go far to remove this disability by enabling uniformity in regulations, tolls, and capacity. The following list of navigations, showing the most direct route between Liverpool and London, illustrates the difficulty of through communication by showing the want of uniformity in gauge and the number of distinct proprietary interests :—



## INLAND NAVIGATION.

## THROUGH ROUTE BETWEEN LONDON AND LIVERPOOL.

| Navigation.                     | Mileage. | SIZE OF LOCKS.     |     |          |      |        |     |
|---------------------------------|----------|--------------------|-----|----------|------|--------|-----|
|                                 |          | Length.            |     | Breadth. |      | Depth. |     |
|                                 |          | ft.                | in. | ft.      | in.  | ft.    | in. |
| Regents Canal .....             | 8½ ..    | 90                 | 0   | ..       | 15 0 | ..     | 5 0 |
| Grand Junction Canal.....       | 101 ..   | 80                 | 0   | ..       | 14 6 | ..     | 4 6 |
| Oxford Canal.....               | 5 ..     | (No lock.)         |     |          |      | ..     | 3 6 |
| Warwick and Napton Canal ....   | 15 ..    | 72                 | 0   | ..       | 7 0  | ..     | 4 0 |
| Warwick and Birmingham Canal..  | 22 ..    | 72                 | 0   | ..       | 7 0  | ..     | 4 0 |
| Birmingham Canal .....          | 15 ..    | 72                 | 0   | ..       | 7 0  | ..     | 4 0 |
| Stafford and Worcester Canal .. | 1¼ ..    | 72                 | 0   | ..       | 7 0  | ..     | 4 0 |
| Shropshire Union Canal .....    | 68 ..    | 80                 | 0   | ..       | 7 6  | ..     | 4 0 |
| River Mersey.....               | 10 ..    | (Open navigation.) |     |          |      |        |     |

Total..... 245½

The foregoing particulars are from a memorandum which was prepared by Mr. E. D. Lloyd, and which forms part of the Appendix to the Report of the Select Committee on Canals (1883).

*Defective Construction.*—Very few canals have their sides efficiently protected. The banks mostly slope from top to bottom, the bottom width being much less than the surface width. In canals so formed, there is a tendency for the bottom to fill up through constant silt. There are not many canals completely faced or walled in. Most are faced partially by “dwarf” walls, which only extend a couple of feet below the water line. This inadequate protection of the sides of the canals unfits them for steam haulage.

The *desiderata* for the improvement of our waterways are as follows :—

1. Increased capacity of waterways.
2. Effective protection of banks.
3. Uniformity of gauge.
4. Application of steam haulage.
5. Improved construction of boats.
6. Organisation of through routes.
7. Arrangement of through rates.
8. Acquisition by Public Trusts.
9. Systematic and regular services.

(1) *Increased Capacity.*—The advantages of increased capacity are shown by the results of the enlargement of the Aire and Calder Navigation, probably the most perfect type of canal transport in this country. This navigation, which connects Leeds with Goole, and was originally only adapted for barges of some sixty tons, has been extended several times. The dimensions of the original locks were 58 feet in length, 14 feet 6 inches in width, and 5 feet 6 inches in depth. At present, the locks on that navigation are 215 feet long, 22 feet wide, and 9 feet deep. Steam haulage is in operation, and a tender can take through a lock, at one passage, eleven boats of special construction, each carrying forty tons, a load in all of 440 tons. The services of only four men are required under this system, the ordinary system requiring the

services of twenty-four men. On this navigation the cost of steam haulage has been shown to be only one penny per ton for thirty-four miles, when hauled by tugs carrying cargo. These locks are to be increased in length in order to allow of the passage of boat trains with about 1,000 tons of cargo.

The measure of economy to be effected by the enlargement of the waterways forming the main trunk routes is shown by a statement handed in to the Select Committee on Canals, 1883, by Mr. J. S. Watson, of Blackwall, which explains that the cost of transport, if effected between London and Liverpool in two 25-ton boats, would be 10s. per ton, exclusive of the tolls for the use of the waterways, which would bring up the total cost to 22s. 6d. per ton. If, however, the transport could be effected with three boats carrying 120 tons each, and of the dimensions of 84 feet in length, 12 feet in width, and 6 feet 3 inches in draught, towed by a steam barge capable of carrying 90 tons of cargo, making the whole load 450 tons, the cost would be reduced to 2s. 6½d. per ton (exclusive of the tolls for the use of the waterways). These tolls would no doubt be considerably reduced were arrangements made for the improvement of the route and for through communication.

(2) *More effective Protection of Banks.*—The complete walling in of the banks instead of the partial facing, would, by the prevention of wear and tear, effect a great saving in maintenance charges. Besides diminishing the outlay on repairs, the deposition of silt and consequent dredging would be greatly reduced. The protection of the banks in an efficient manner would enable the use of steam haulage. The outlay necessary would be more than recouped by the economies effected.

(3) *Uniformity of Gauge.*—Our railway system presents many valuable features in its economy which could be applied with profit to our waterways. Among these is the advantage of a common gauge. Upon a common gauge may be said to depend the whole of any effective reorganisation of our inland navigation system. With the existing breaks in through routes, which are occasioned by the want of uniformity in gauge, it is out of the question to arrange for through traffic.

(4) *Use of Steam Haulage.*—The example afforded by the case of the Aire and Calder Navigation, where the application of steam haulage to boats of special construction, with an enlarged channel and more spacious locks, is a complete demonstration of the advantages attending steam haulage. Even on an unimproved canal, the Bridgewater Canal, the use of steam tugs has been proved to be far more economical than horse haulage. The tugs in use on the Bridgewater Canal are constructed to draw three barges of about 40 to 50 tons burden. There are, however, differences of opinion as to the best method of steam haulage. One plan is to construct a line of rails along the towing path by which the haulage might be effected with a small locomotive. The advantage attending this plan is that steam haulage could be cheaply used without any risk of damage from which the banks of an ordinary canal would suffer, owing to the wash of the propellers of steam tugs. These locomotives could be worked night and day by relays of men, and thus save loss of interest.

(5) *Improved Construction of Boats.*—The resistance to boats on canals consists partly of the resistance occasioned by the displacement of the water, partly by the resistance occasioned by the "piling" of the water in front of the boat, and partly by



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the resistance caused by the friction on the surface of the boat. Canal boats, as at present built, seldom conform to the most approved conditions. As a general proposition, canal boats should be very narrow in proportion to length, in order that they may pass in opposite directions without duly increasing the cost of the canal by its width.

(6) *Organisation of Through Routes.*—This object would be best effected by all the links in a through route being in the hands of one administration. This desirable arrangement could be brought about by any of three several methods.

(1) The State might compulsorily purchase the whole of the proprietary interests in the inland waterways of this country on an equitable basis of acquisition, and work them in the general interest of the nation. State action of this kind has produced very satisfactory results in France, Belgium, Holland, Sweden, some of the United States, and in the Dominion of Canada.

(2) The Legislature could empower the county authorities to acquire the waterways within their boundaries on equitable terms and work them in the general interest of the district. Those counties interested in waterways forming links in through routes could combine in the formation of a public trust, each county participating in the requisite outlay on improvements and in the income on a basis arranged in proportion to the mileage and traffic of the waterways within the respective boundaries of the counties concerned.

The Weaver Navigation in Cheshire is an example of an inland waterway owned and managed by a County Trust appointed in the interest of its inhabitants. This navigation, besides conferring very great advantages on the County of Chester, makes an annual balance on its working which is applied in relief of the county rates.

(3) Private enterprise would find an excellent field for remunerative investment in the purchase and improvement of the different links which occur in a through route. Parliament will view with favour and give its sanction to any arrangement contemplating the improvement and development of our neglected waterways, if such projects be taken in hand by capable men of resource, whether the means be that of private companies or public trusts.

The incorporation of the Manchester Ship Canal Company in 1885 exemplifies the willingness of Parliament to give encouragement to enterprise calculated to develop our national resources. Manchester was connected with her port of Liverpool by the Mersey and Irwell Navigation, those rivers being partly canalised between Manchester and Runcorn, whence access to Liverpool is obtained by the Mersey Estuary. This navigation was executed under the provisions of an Act of Parliament obtained in 1721. Until the opening of the Bridgewater Canal to Runcorn in 1776 the Mersey and Irwell Navigation had practically enjoyed a monopoly of the traffic between Manchester and Liverpool and *vice versa*. In 1872 the Bridgewater Canals and the Mersey and Irwell Navigation passed into the hands of a common proprietary, under the title of the Bridgewater Navigation Company. This company had acquired the Mersey and Irwell Navigation in order to prevent it getting into independent hands, which might improve it and utilise it as a serious



competitor. The Bridgewater Navigation Company bought the Mersey and Irwell Navigation in order to prevent it being used as a competitor. This being the only object in view, no attempt was made to improve the navigation, nor any endeavour to develop its traffic. On the contrary, it was so neglected as to become next to useless. Having thus bought up the only possible competitor, the Bridgewater Navigation Company, instead of giving the public the advantage of the greater cheapness of water transport, being fully conscious of their power as monopolists, charged precisely the same rates as the railway companies. It was mortifying to the public of Manchester to see the "Old River," as Manchester folks term it, in the hands of a company which, instead of carrying out the long-cherished project of improving the navigation in order to accommodate large sea-going vessels, so neglected it that it became almost useless. This led, in 1876, to the resuscitation of the idea of the Manchester Ship Canal, which had been the subject of an application to Parliament in 1825, and the project was revived again in 1841. In 1877 the matter was considered by the Manchester Chamber of Commerce, which expressed its conviction that it would be of great advantage. It was not, however, until 1882 that the organic movement which has resulted in the incorporation of the Manchester Ship Canal Company was instituted. This company has been authorised to acquire the entire interest of the Bridgewater Navigation Company, and has purchased the same for the sum of £1,710,000. This purchase has been sanctioned by Parliament, in order that the neglected and almost disused Mersey and Irwell Navigation, only capable when in good order of accommodating fifty-ton barges, may be improved upon by a magnificent waterway, providing access to the centre of the most populous and greatest traffic area in the world, for large ocean steamers, Parliament having authorised this undertaking as being in the general interest of the Commonwealth.

(7) *Arrangement of Through Rates.*—This will follow as the necessary outcome of any arrangement for a through route. On waterways there are two distinct classes of charges. "Toll" is the charge made for the use of the waterway, the carrier providing his own boats. "Rate" is generally applied to the charge for freight. On a waterway a merchant may carry his goods in his own boats simply by paying the toll; if the merchant does not provide his own boats, then he has usually the choice of sending his goods by the boats of the proprietors of the waterway, who sometimes act as carriers, or by independent carriers, in any case both toll and freight having to be paid. A merchant with a large movement of goods would, in many cases, find it cheaper to do his own carrying. The competition, however, between the independent carriers would ensure a moderate rate of freight for the merchant. The organisation of through routes, improved to meet current requirements, would lead to the provision of regular lines of improved boats, and ordinary competition would soon determine reasonable rates; and with the development of water traffic, which would follow as the result of such arrangements, the expansion of the volume of traffic would enable a material reduction of tolls and an appreciable reduction in the cost of freight in the course of a few years.

(8) *Acquisition by Public Trusts.*—This is dealt with under (6) *Organisation of through routes.*

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(9) *Systematic and Regular Services.*—Whatever be the nature of the ultimate proprietary or administration of our waterways, it is very essential to their development to establish regular services at stated times, with a specific guarantee as to time of delivery. This is absolutely necessary in order that traders may know exactly when their consignments should be despatched, and when they may reasonably expect the consignee to receive them. To ensure greater efficiency in the distribution of merchandise, better facilities will require to be provided than at present exist in the way of wharfage and warehouse accommodation.

## (h) THE POTENTIALITY OF OUR WATERWAYS.

It has been shown that our Inland Navigation system, with all its imperfections, has been of material advantage to our traders. The corrections of these imperfections will as surely lead to advantageous results in this country as they have done in France, Belgium, Holland, Germany, and other countries with which we have to compete for the trade of the world. There can be no question that we are severely handicapped in our competition by the much higher charges for transport which exist in this country as compared with those of several of our competitors. The gravity of the situation is well illustrated by a report prepared by Sir B. Samuelson, M.P., in 1885, showing that the charges for inland transport in this country are much higher than those in Germany, Belgium, and Holland. In an instructive paper on canals, which was read before the British Association at its meeting in Birmingham in 1886 by Mr. Marshall Stevens, it is shown that, notwithstanding that railway rates are considerably lower in France than in this country, a distinct preference is shown for inland water transport in that country. As an evidence of this tendency Mr. Stevens states that out of 190,500 tons of cereals and 80,000 tons of building timber imported into Rouen in 1883, no less than 181,508 tons of cereals and 70,000 tons of timber were despatched inland by water.

The port of Rouen itself furnishes an instructive example of the advantages attending inland navigation. It is seventy-four miles from the sea, and the improvements of the Seine in affording access to Rouen have made it the fourth port in France. The Co-operative Wholesale Society contribute to the tonnage of Rouen, having a fortnightly service of steamers between Garston and that port.

The improvement of the Maas has conferred great advantages upon the port of Rotterdam. Between 1873 and 1884, owing to the improved depth of the river, the increase in the number of vessels and aggregate tonnage was respectively: vessels, from 4,471 to 8,177; aggregate tonnage, from 3,740,000 cubic metres to 12,401,000 cubic metres.

The growth of the shipping trade of the port of Antwerp is a forcible exemplification of the advantages accruing from the improvement of an inland navigation. The tonnage of vessels entering the port of Antwerp in 1850 was 250,000 tons. In 1865 it had increased to 750,000 tons, in 1880 to 3,000,000 tons, and in 1882 to 3,450,000 tons. At the mouth of the Scheldt, by which access is obtained to Antwerp, there is an admirable harbour at Flushing where the largest ocean steamers can enter or leave



with ease at all times. [Nevertheless this port fails to secure anything like the magnitude of shipping tonnage which traverses sixty miles of inland navigation to reach Antwerp. The shipping passes by Flushing for Antwerp because that city is central to a very populous industrial community with great sea-borne traffic requirements. The very favourable situation of Antwerp explains the remarkable expansion of its traffic. The conditions at Antwerp are in many respects similar to those which exist at Manchester. Manchester is, however, central to a greater traffic-requiring and more populous area than Antwerp.

The port of Amsterdam is another important illustration of the advantages of inland navigation. Although standing on the Zuider Zee, an arm of the North Sea, and having a depth of 40 feet of water in the road in front of the port, vessels of any considerable size had to load or discharge outside a sand bar over which there is only 10 feet of water. To overcome this difficulty an inland ship canal fifty miles in length was completed in 1825, connecting Amsterdam with the Helder, the most northern point in the province of North Holland. It is known as the North Holland Canal. The increasing capacity of vessels and the desire to have a shorter access to the sea led to the construction of a new ship canal, to accommodate modern ocean steamers, which connects Amsterdam with the North Sea at Ymuiden, a distance of sixteen miles. It was opened in 1876. Between 1876 and 1884 the tonnage entrances, and clearances from the port of Amsterdam increased from 2,200,000 cubic metres to 5,123,000 cubic metres. It is known as the Amsterdam Canal.

Many other examples could be mentioned, showing the great attention paid by our continental neighbours to the development of inland navigation, but enough have been given to demonstrate that we cannot afford to view with complacency the efforts of our competitors without taking active steps to secure similar advantages, which appear to be absolutely necessary for the preservation of our trade.

Great as has been the attention paid by our continental neighbours to inland navigation, their zeal in its development remains unflagged. In 1885 an International Conference on Inland Navigation was held in Brussels, under the auspices of the King of Belgium; and in 1886, another International Conference was held in Vienna, under the auspices of the Archduke Rudolph, Crown Prince of Austria. A third International Conference is arranged to be held in 1888, in Frankfort-on-the-Maine.

Although for over half a century this country has been apathetic and indifferent with regard to inland navigation, there are several instances of important improvements. Among these the improvement of the Tyne is the most noteworthy example in England and Wales. The principal works on the Tyne were effected between 1860 and 1881, during which period over 60,000,000 tons of matter were dredged from that river. In 1860 the depth at low water in Newcastle Harbour varied from  $3\frac{1}{2}$  feet to  $8\frac{1}{2}$  feet. In 1879 the depth had been increased to 20 feet to 25 feet at low water, or from 35 feet to 40 feet at high water, spring tides. As indicating the splendid results which have followed upon the deepening of the Tyne, the subjoined figures are of special significance :—



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|                                                                         | 1861.     |      | 1884.     |
|-------------------------------------------------------------------------|-----------|------|-----------|
| Total tonnage clearing from Tyne Ports ..                               | 3,196,781 | .... | 6,237,584 |
|                                                                         | Tons.     |      | Tons.     |
| Total exports of coal coastwise and abroad.                             | 4,503,363 | .... | 9,721,023 |
| Gross revenue of Tyne Commission .....                                  | £74,985   | .... | £275,805  |
| Population of Tyne Ports .....                                          | 228,000   | .... | 530,000*  |
| Number of vessels of 500 tons and upwards<br>cleared from the Tyne..... | 246       | .... | 5,187     |

Important improvements have also been effected on the Tees in providing access for larger vessels to the ports of Middlesborough and Stockton-upon-Tees. The principal works have been effected since 1865, and by 1878 vessels of 3,000 tons could be fully laden at Middlesborough.

The improved capacity and other improvements on the Aire and Calder Navigation have already been mentioned.

The Weaver Navigation in Cheshire is one of the best examples of improvement. Originally intended for vessels of about 100 tons, it has twice been enlarged, and now accommodates barges of over 300 tons.

Several healthy indications of an increasing attention to the improvement of inland navigation have recently been manifested in this country. The constitution of the Manchester Ship Canal Company, as the result of the most prolonged and arduous struggle in the annals of private Bill legislation, will probably prove to be the pioneer effort in a series of surprising developments. Preston, emulating the public spirit displayed by Manchester, is spending over £1,000,000 on the improvement of the Ribble Navigation and the provision of harbour accommodation.

Action is being taken for the improvement of the Trent between Burton and Nottingham, and a second improvement in connection with this river is contemplated between Nottingham and the Humber.

In Birmingham there are two great inland navigation projects under consideration. A special committee of the Birmingham Town Council has been appointed to consider and report on any scheme for the improvement of the canal communication between Birmingham and London, or Liverpool, or any of the other ports.

A number of influential Birmingham gentlemen are interesting themselves in the promotion of an improved waterway between Birmingham and London, which depends upon an enlargement of the existing canals. It is estimated that an improved through canal route from Birmingham to London would secure 2,000,000 tons of traffic per annum. The estimated cost of the projected improvements is £1,250,000. As the traffic is very considerable, an undertaking of this kind should prove very remunerative. Another project which is engaging attention in Birmingham is an improvement of the existing waterways between Birmingham and Bristol. The required outlay is estimated at £1,890,000.

In considering the potentiality of our inland navigation, an important feature to be borne in mind is, that so far from the functions of our waterways being exhausted, not only have they not so far been fully utilised, but there is more urgent

\* Estimated population within jurisdiction of Tyne Commission.

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necessity than ever for turning our waterways to the best account in consequence of the action with regard to waterways by our competitors. Just as the old candlewick light, the oil lamps, gaslighting, and electric lighting have each a function, and all find increasing occupation, so will the small-barge canal, the large-barge canal, the ocean-steamer canal, and the railway, each continue to find its function, and all will continue to enjoy prosperity.

Half a century ago the clear-minded M'Culloch observed, in an article on canals in his "Dictionary of Commerce": "It is not very material whether a ton of lime, or coal, or of manure, be moved with a velocity of three to ten miles an hour, at least the advantage of superior speed would in such a case be effectually over-balanced by a small additional charge." In spite of the fact that it cannot make any material difference whether coals be carried at 40 miles per hour and reach London in a few hours, or be sent to London by sea or canal and occupy a few days, yet out of an annual consumption of coal in London of 11,000,000 tons, only 4,000,000 are sent by sea from the North-Eastern ports, about 7,000,000 tons being sent by rail from the Midland Counties. This can only be characterised as a dissipation of national energy. The outcome is shown by the particulars contained in a paper handed in by Mr. F. R. Conder, C.E., to the Select Committee on Canals, 1883, which show that from 1871 to 1880 the net earnings of four non-mineral-carrying railway lines to and through London increased by 40·6 per cent. On the other hand, during the same ten years, the net earnings of four mineral-carrying lines to London decreased by 11·7 per cent. In addition to the unprofitable working of the mineral traffic as such, the cost is further added to by the necessity for a large proportion of shunting operations, which are chiefly required to relieve the main lines of mineral trains. Now, if any class of traffic is worked unprofitably, whether by road, river, or rail, it is clear that if a respectable dividend is paid, other classes of traffic have to bear the incidence of charges that are higher than would otherwise require to be imposed.

As an illustration of the future possible for our waterways, if only adapted to current requirements, an analysis of the aggregate tonnage conveyed by railways in England and Wales will show that there is plenty of traffic—in fact that by far the largest proportion of existing traffic is peculiarly appropriate for conveyance by water. In 1885 the aggregate tonnage conveyed by rail was 218,750,000. Of this only 62,500,000 tons were general merchandise, the quantity of mineral tonnage being 156,250,000. Is it possible that one-tenth of this mineral traffic requires the urgency of speed? If it is not necessary that the bulk of the mineral traffic should be so conveyed, it is obvious that if the necessary reforms of our inland navigation were carried out they would secure a very large volume of traffic.

This would be no injury to our railways. The relief of a large proportion of the mineral traffic would be distinctly beneficial to the railway interest. The increasing volume of trade and the enormous growth of population would, co-incidentally with the transfer of the heavy traffic, lead to a large expansion in the fine goods and passenger traffic, with which speed is frequently a material consideration.

Owing to the poverty of information with regard to our inland waterways, there is not sufficient material to enable a fair comparison of the aggregate tonnage



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conveyed by waterways in this country with the quantity of goods conveyed by rail. The return relating to inland navigation and canal companies which was issued in 1870, on the motion of Mr. Dodds, does not afford all the particulars necessary to give the actual growth of traffic on our waterways. But from this return it appears that upon twenty-nine river or canal navigations, with a collective length of 1,390 miles (being less than two-fifths of the aggregate mileage in England and Wales), there were conveyed in 1838 some 15,500,000 tons of goods and minerals. In 1868 the tonnage had increased upon this mileage to 21,250,000 tons. If only half of this traffic in proportion to the mileage be allowed for the remaining 2,280 miles of inland waterways in England and Wales, on this basis the total tonnage conveyed on our waterways in 1868 would amount to 38,750,000. In that year the railway returns, not being complete, were not made up; but, after allowing for the expansion for the figures in 1869, the mileage of the railways in England and Wales in 1868 would be about 10,500, made at an outlay of £420,000,000. The weight of goods and minerals conveyed by railways during 1868, may be estimated at 120,000,000 tons. Practically speaking, then, in 1868 the combined mileage of the railways and waterways of England and Wales was, roundly, 14,000 miles, the waterways forming about one-fourth of the whole mileage and conveying about one-fourth of the entire traffic. Dividing the volume of traffic by the mileage, the respective tonnages by rail and water in 1868 were 11,428 tons, and 10,544 tons per mile. Taking into account the deplorable condition of most of our waterways and the high-class efficiency of our railways, ought not these results, which under the conditions are certainly encouraging, to justify anticipations of excellent results with a reformed system of inland waterways?

Between 1868 and 1884 the railway mileage in England and Wales increased from 10,500 miles to 13,340, and the total amount of capital expended from £420,000,000 to £665,000,000.

## (i) WATERWAYS AS INVESTMENTS.

As investments many waterways, like many railways, have proved unprofitable. During the railway mania of 1846, it is said that the only essential feature in urging a case for a railway Act was the description of two geographical points on an ordnance map of England which required connection. Whether there was any reasonable prospect of traffic or not did not seem to be a material element in the matter. Between 1790 and 1795 a canal mania prevailed, and Acts were obtained in that period for no less than fifty new undertakings, many of which had not a ghost of a chance of ever repaying the investors, for the simple reason they passed through districts where the traffic was plainly insufficient to warrant the outlay, after allowing for any reasonably-considered estimate of a probable increase in the volume of traffic. But where the traffic did exist, as on the lines of communication serving the manufacturing districts, the dividends which have been earned in times past have been so respectable as to justify the anticipation that with such improvements as are required to make our waterways suitable for current requirements, a satisfactory return may be depended upon. There can be no doubt that whenever our waterways are put in order a most remarkable expansion of traffic upon them



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will immediately manifest itself. As affording some indications of past results, the following figures will be instructive. The prices for 1833 are extracted from a share list published on the 12th October, by Mr. Edmunds, broker, 9, Change Alley, Cornhill. The prices for 1843 are taken from the Trading List of 27th June of that year :—

## SELLING PRICES OF CANAL STOCK.

|     | Name of Canal.               | Amount.<br>£      | 1833.<br>£ | 1843.<br>£ |
|-----|------------------------------|-------------------|------------|------------|
|     | Barnsley .....               | 160               | 290        | 259        |
| (a) | Birmingham .....             | 140               | 1,868      | 3,040      |
|     | Chelmer and Blackwater ..... | 100               | 103        | 105        |
|     | Chesterfield .....           | 100               | 176        | 170        |
|     | Coventry .....               | 100               | 600        | 320        |
|     | Cromford .....               | 100               | 300        | 325        |
|     | Derby .....                  | 100               | 117        | 119        |
|     | Erewash .....                | 100               | 705        | 675        |
|     | Glamorganshire .....         | 172 $\frac{2}{3}$ | 290        | 210        |
|     | Grantham .....               | 150               | 200        | 215        |
| (b) | Leeds and Liverpool .....    | 100               | 470        | 650        |
|     | Leicester .....              | 140               | 175        | 144        |
|     | Loughborough .....           | 142 $\frac{1}{2}$ | 1,820      | 1,400      |
| (c) | Mersey and Irwell .....      | 100               | 750        | 385        |
|     | Monmouthshire .....          | 100               | 198        | 185        |
|     | Nottingham .....             | 150               | 265        | 262        |
|     | Neath .....                  | 107 $\frac{1}{2}$ | 290        | 325        |
| (d) | Oxford .....                 | 100               | 595        | 538        |
|     | Shrewsbury .....             | 125               | 255        | 280        |
|     | Somerset Coal .....          | 50                | 170        | 151        |
| (e) | Stafford and Worcester ..... | 140               | 610        | 600        |
| (f) | Stourbridge .....            | 145               | 200        | 375        |
|     | Stroudwater .....            | 150               | 500        | 490        |
|     | Swansea .....                | 100               | 220        | 245        |
|     | Tavistock .....              | 100               | 105        | 105        |
| (g) | Trent and Mersey .....       | 200               | 2,560      | 1,940      |
|     | Warwick and Birmingham ..... | 150               | 278        | 167        |
|     | Warwick and Napton .....     | 100               | 210        | 123        |

(a) The Birmingham Canal Navigations are leased in perpetuity under an Act of 1846 to the London and North-Western Railway Company in consideration of a guaranteed payment of 4 per cent per annum. The original £100 stock being valued at £3,200, according to the arrangement entered into by the London and North-Western Company, the original shares of £100 consequently now receive a guaranteed payment of £128 per annum in perpetuity. Prices marked in 1885 of £100 stock : Highest, £115. 4s. ; lowest, £103 ; latest, £113.

(b) The stock of the Leeds and Liverpool Canal Company is now £140. It earns from £17 to £21 per annum. Price marked in Liverpool list, 1885, £446.

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(c) In 1830 the £100 stock of the Mersey and Irwell Navigation Company was £1,250. In 1872 the interest in this was acquired by the Bridgewater Navigation Company Limited. In August, 1887, it was acquired by the Manchester Ship Canal Company along with the Bridgewater Canals. The Bridgewater Navigation Company, which worked both the Bridgewater Canals and the Mersey and Irwell Navigation, has never paid less than 8 per cent, and has paid as much as 9½ per cent.

(d) Oxford Canal Company dividends: 1881-2, 7 per cent; 1883, 7½ per cent; 1884, 7½ per cent.

(e) Staffordshire and Worcestershire Canal Company: Dividend 1882-83-84, 5 per cent. Price marked in Birmingham list—ordinary, £100; debenture, £112.

(f) Stourbridge Canal Company: Dividend 1879, £4. 10s. per share; 1880 to 1882, £7; 1883, £5. 10s.; 1884, £5.

(g) The Trent and Mersey Canal was merged in the North Staffordshire Railway Company in 1846, which guarantees a perpetual payment of £5 per cent per annum on £1,170,000.

Recent prices and dividends of sundry canal stocks:—

Coventry Canal: £100; 1885, £215.

Droitwich Canal: Leased to Sharpness New Docks and Gloucester and Birmingham Navigation Company for 999 years, in consideration of 8 per cent per annum being guaranteed.

Droitwich Junction Canal: Leased for 99 years to Sharpness New Docks and Gloucester and Birmingham Navigation Company, in consideration of 5 per cent per annum being guaranteed.

Aire and Calder Navigation: The accounts are not published for general circulation. The average income for 1883-84-85 has been £150,000, and the average net revenue £80,000.

Ashton and Oldham Canal: Leased in perpetuity to Manchester, Sheffield, and Lincolnshire Railway, subject to a rent equal to 7 per cent interest.

Grand Junction Canal: Ordinary shares, 4 per cent; preference shares, 6 per cent.

Macclesfield Canal: Leased in perpetuity to Manchester, Sheffield, and Lincolnshire Railway Company, at a rental equal to 2½ per cent.

Rochdale Canal: Since 1876 has paid £2 per share of £85 each half year.

Peak Forest Canal: Leased in perpetuity to Manchester, Sheffield, and Lincolnshire Railway Company, at a rental equal to 5 per cent per annum.

(j) NOTES ON PROBABLE OUTLAY REQUIRED FOR THE IMPROVEMENT  
OF OUR WATERWAYS.

THE past outlay on our waterways it is impossible to state with any degree of accuracy. Consequently it makes it very difficult to estimate the probable outlay on the improvement of our waterways. An estimate was handed in to the Select Committee on Canals (1883), by Mr. F. R. Conder, C.E., in which he puts down the total outlay on waterways in England and Wales as being £19,145,875. Mr. Conder stated, however, that his data were somewhat unreliable. As Mr. Conder puts this down as the cost of 4,332 miles of waterways, the average cost per mile would be about £4,400. Mr. Conder stated that, in his opinion, £6,000 per mile would be a



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sufficient outlay in addition to the first cost to make a canal equal in efficiency to the Grand Junction Canal, the locks upon which are 80 feet long, 14 feet 6 inches wide, and 4 feet 6 inches deep.

Mr. James Abernethy, Past President of the Institute of Civil Engineers, with forty years' experience of hydraulic engineering, stated he had long felt that were our waterways improved it would be greatly to the advantage of commerce. In his judgment an outlay of £12,000 per mile in addition to the first cost of an ordinary barge canal would enable an improvement which would afford results equal to those on the Aire and Calder Navigation. The cost of the old English canals of small type ranged from £7,000 to £8,000 a mile. He would suggest that the capacity of the locks on a through waterway route should be 212 feet long, 22 feet wide, and 9 feet depth over the sills. His estimate of £12,000 per mile in addition to first cost would cover such an improvement.

Lieutenant General Rundall, R.E., Inspector General of Irrigation Canals to the Government of India, stated that he attached the highest importance to the improvement of the waterways of England. He would enlarge the sections of canals on main lines to 60 or 70 feet. The locks should not be less than 150 feet long, 20 feet wide, with 8 feet 6 inches depth of water on sill. The first cost of the main lines he put down at £10,000 a mile, and believed £5,000 to £6,000 per mile would effect the improvements he suggested. The tonnage of the barges would be from 200 to 300 tons.

As roundly 4,000 miles of waterways have been made in this country at an estimated average cost of £10,000 per mile, this presumes an outlay of £40,000,000, which is probably the estimate most approximate to the actual cost. In a pamphlet published in 1845 by Messrs. Bradshaw and Blacklock, of Manchester, compiled by Mr. Thomas Salt, and entitled "Statistics and Calculations essentially necessary to persons connected with Railways or Canals," there is a fund of valuable information relative to the economy of both canals and railways. A copy of this pamphlet may be seen in the Public Free Reference Library, King Street, Manchester. In the pamphlet referred to it is stated: "In Great Britain and Ireland 2,750 miles of canal were constructed between the years 1760 and 1824 at an expense of nearly £31,000,000, or £11,272 per mile." As the figures in the pamphlet have all been compiled from authoritative sources this reference to the cost of canals affords a fair presumption that the estimate of £10,000 per mile is approximately correct.

While it is impossible to tell the actual outlay which may be required for bringing our waterways into an efficient condition without special inquiry into the individual merits of each undertaking, if the first cost be assumed as £10,000 per mile, and the estimate of £12,000 of Mr. Abernethy as the cost of improvement, this gives a maximum outlay of £22,000 per mile. From the data furnished by the railway returns annually published by the Board of Trade, the average cost of the English railway system has been £49,000 per mile for their construction and equipment. It is clear, therefore, that an efficient canal costs more than one-half less per mile than a railway.

During twenty-five years—1860–1884—the net receipts of the railways of the United Kingdom have fluctuated between 3·86 per cent on paid-up capital, and 4·74 per cent.



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Although the information as to canal traffic and earnings is very limited, there is a sufficiency to show that they are a profitable investment, and the presumption that they would be more profitable if improved, is reasonable. There are several features which help to make canals more profitable than railways.

(1) On railways expenses increase in proportion to traffic. On waterways the increase of traffic scarcely makes an appreciable addition to expenses.

(2) Waterways do not incur the expenses entailed by the block system, which is compulsory on railways.

(3) Shunting operations on railways are very costly, and are not required in the working of waterways.

(4) The less capital outlay on canals involves a less interest charge, and a less revenue will pay an equally satisfactory dividend as the average dividend of railways.

(5) The cost of transport on canals is far less than the cost on railways.

Taking these things into account, improved canals ought to pay at least from 5 to 6 per cent.

## III.—THE WATERWAYS OF SCOTLAND.

THE most important waterway of Scotland is the Clyde Navigation, the splendid result of Glasgow energy in digging out a road to the sea, and gaining by art those advantages denied to her by nature. In 1768, the River Clyde could be crossed on stepping stones at Dumbuck Ford, twelve miles below Glasgow. Now magnificent steamers of 5,000 tons anchor right in the heart of Glasgow. Through indomitable perseverance the gradual improvement of the Clyde has raised Glasgow from the obscurity and insignificance of a small salmon-fishing village to the position of a commercial metropolis of the first rank. The Clyde Navigation extends from Glasgow Bridge to the Firth of Clyde, which it joins opposite Gourock, a distance of 25 miles. The jurisdiction of the Clyde Trust only extends to Port Glasgow, which is 18 miles from Glasgow Bridge. Between Glasgow and Port Glasgow at high water there is a depth of 24 feet.

The saying of the citizens of Glasgow, that "the Clyde made Glasgow," is abundantly proved by the following statistics, which show the marvellous results which have followed from the improvement of the River Clyde:—

## STATISTICS ILLUSTRATIVE OF THE DEVELOPMENT OF GLASGOW.

| Year.      | Tonnage<br>Entered.<br>Tons. |       | Revenue of<br>Clyde Trust.<br>£ |       | Population. |
|------------|------------------------------|-------|---------------------------------|-------|-------------|
| 1801 ..... | —                            | ..... | 3,401                           | ..... | 77,385      |
| 1811 ..... | —                            | ..... | 4,755                           | ..... | 100,749     |
| 1821 ..... | —                            | ..... | 8,070                           | ..... | 147,043     |
| 1831 ..... | 732,327                      | ..... | 18,392                          | ..... | 202,426     |
| 1841 ..... | 1,142,373                    | ..... | 49,666                          | ..... | 255,650     |
| 1851 ..... | 1,446,606                    | ..... | 68,855                          | ..... | 329,096     |
| 1861 ..... | 1,504,220                    | ..... | 105,769                         | ..... | 395,503     |
| 1871 ..... | 2,049,708                    | ..... | 164,189                         | ..... | 477,710     |
| 1881 ..... | 3,057,533                    | ..... | 248,061                         | ..... | 668,559*    |

\* Including population (157,327) of suburban burghs.

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The next waterway in order of importance is the Forth and Clyde Junction Canal, which was commenced in 1768, and completed in 1790. It is a magnificent enterprise, and cost £720,000. It commences in the River Forth at Grangemouth Harbour, and extends to Bowling on the Clyde, which is eleven miles below Glasgow. The locks are 74 feet long, and 20 feet wide. There are thirty-nine locks. Its summit level is 156 feet above the level of the Forth, the bottom width is 27 feet, and the surface width is 56 feet, and depth 10 feet. Including branches to Glasgow and Monkland the length is 39 miles.

The Edinburgh and Glasgow Union Canal, which extends from the Forth and Clyde Junction Canal at Falkirk to Edinburgh, connects Glasgow and Edinburgh. It is 5 feet deep, 20 feet bottom width, and 40 feet surface width. It is 32 miles in length. Commenced 1817, and completed 1822.

A valley, known as the Great Glen of Scotland, stretches across the Highlands from Inverness on the east coast to Loch Eil on the west coast. Thirty-seven-and-a-half miles of the intervening distance is occupied by a chain of lochs, which are respectively Loch Ness, Loch Oich, Loch Lochy, and Loch Eil. These lochs have been connected by artificial canals, of which the aggregate length is 22 miles. This chain of lochs and connecting canals forms the navigation known as the Caledonian Canal, which from end to end is 60½ miles. The artificial canals, the aggregate length of which is 23 miles, are 50 feet wide at the bottom, and 120 feet wide at the water level, the depth being 20 feet. There are 28 locks, each having a rise or fall of 8 feet. The locks are 172 feet long, 40 feet wide, and 20 feet deep. Had these dimensions been adhered to throughout, the canal would have accommodated vessels of 1,000 tons. To save expense the canal was not made of its full depth of 20 feet in the shallow portions of Loch Oich, and that portion on the summit level; as the consequence, it cannot afford a passage for vessels drawing more than 17 feet of water, or being more than 300 tons burden. The summit level is 96½ feet above the Atlantic Ocean. The cost of the works amounted to nearly £1,000,000. The undertaking was authorised in 1803, and opened in 1822. According to the Eightieth Report of the Commissioners of the Caledonian Canal, the total passages of vessels in the year ending April 30, 1885, was 2,059, of which 1,054 were steamers and 1,005 sailing vessels.

Another ship canal, the Crinan Canal, was made across an isthmus in Argyleshire, lying between Lochs Crinan and Gilp, under an Act obtained in 1793. It is 9½ miles in length, and 12 feet in depth, and accommodates vessels of 160 tons burden. Its object is to shorten the passage between the Highland ports and the Clyde ports, saving some 70 miles by avoiding the circuitous route around the Mull of Cantyre, which is difficult and dangerous from contrary winds and lee shores, and the risk of being driven on one of the numerous islands and rocks. According to the Report of the Commissioners of the Caledonian Canal, the number of passages effected on the Crinan Canal in the year ending April 30, 1885, was 2,436, of which 272 were steamers, 1,582 sailing vessels, and 582 boats.

The Cart River (sometimes called the White Cart) connects Paisley with the Clyde, the distance being about five miles. This river was improved under Acts obtained in 1753 and 1787, and so recently as 1883 steps have been taken for its further improvement, the intention being to increase its depth to 20 feet.



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The Borrowstouness Canal was made under Acts obtained in 1768 and 1783, and extends from Borrowstouness to Grangemouth, its principal object being the avoidance of the difficult navigation of the Forth. The length is 7 miles and the depth is 7 feet.

In 1770 an Act was obtained for the construction of a canal from what were called the Old Monkland Coal Works, which are about ten miles east of Glasgow, to enable that city to be cheaply supplied with coal. The Monkland Canal has been very successful in fulfilling its object, and is of interest as affording an excellent example of the application of, the inclined plane, which dispenses with the necessity for locks. This incline, which is known as the Blackhill incline, was designed by Mr. Leslie, C.E. It is described as follows by Mr. L. F. Vernon-Harcourt, C.E., in his instructive "Treatise on Rivers and Canals":—"The incline has a rise of 96 feet, and a gradient of one in ten. A double line of way was laid on the incline with a gauge of 7 feet. A carriage with twenty wheels was made for running on each line of way, and so constructed that it could carry a water-tight wrought-iron caisson, 17 feet long,  $13\frac{1}{2}$  feet wide, and  $2\frac{1}{2}$  feet deep, in a horizontal position on the incline. The two carriages with their caissons and load of water counterbalance one another, one ascending as the other descends. The carriages are moved by two engines, which turn two vertical drums, in opposite directions, round which the wire rope which hauls the load is coiled. The weight of the carriage, boat, and water is about eighty tons. When a boat is to be taken up the incline one of the caissons is immersed in the lower reach, the lower gate of the caisson is raised, and the boat floated in and the gate lowered. The carriage is then drawn up the incline, and on reaching the top the caisson is pressed against the entrance channel of the upper reach, which is closed by a lifting gate so as to form a water-tight joint. The gate of the canal and the upper gate of the caisson are then lifted, and the boat is passed into the upper reach. The whole operation only occupies ten minutes, and as one boat can be let into the lower caisson whilst another is being let out of the upper caisson, a boat can be passed up every eight minutes, effecting a saving in time of twenty to thirty minutes compared with the passage up through the adjacent flight of locks used for descending boats."

Under Acts severally obtained in 1796, 1801, and 1809, the Aberdeenshire Canal was constructed in order to connect Inverury with the port of Aberdeen. It is 19 miles in length, 23 feet wide, and 3 feet 9 inches deep. The fall from Inverury to low-water mark in Aberdeen Harbour is 168 feet, by 17 locks. The principal object of this canal is the conveyance of granite from the quarries on its banks, large quantities of which are exported to London and other parts of the country.

In order to facilitate the conveyance of imports of coal, lime, manure, and general merchandise into the county of Kirkcudbright, and the exports of produce from the county, an Act was obtained in 1802 under which a canal, known as the Glenkennes Canal, was made between Dalry and the tideway of the Dee, close to the town of Kirkcudbright. It is  $25\frac{1}{2}$  miles in length, in the course of which there are 14 locks. The canal was projected by Sir John Rennie.

In 1806 an Act was obtained authorising a canal between Glasgow, Paisley, and Ardrossan. The canal was, however, only constructed as far as Johnstone, some 11 miles from Glasgow. In 1827 a further Act enabled the proprietors to construct



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a railway from Johnstone to Ardrossan, the distance being  $22\frac{1}{2}$  miles. In 1869 an Act vested the Glasgow, Paisley, and Johnstone Canal, and the railway to Ardrossan, in the Glasgow and South-Western Railway Company, in consideration of the annual payment of £3,472 on a valuation of £97,250, this being a rent charge of  $3\frac{3}{8}$  per cent per annum. In 1881 powers were obtained to convert the canal into a railway.

The River Nith Navigation was undertaken under an Act obtained in 1811 for the improvement of that river. The navigation extends from Dumfries Bridge to the Solway Firth, the distance being nine miles.

In 1830 a commission was authorised by Parliament for the improvement of the navigation of the Tay River. This navigation, which extends from Perth to the North Sea, into which the Tay debouches five miles east of the port of Dundee, is 28 miles in length. It is known as the Tay River and Perth Navigation; and, by its extending the facilities of navigation nearly 30 miles into one of the fertile districts of Scotland engaged in manufactures as well as agriculture, has proved of great advantage to Perthshire. The expense of the improvements was discharged out of the funds of the city of Perth.

## IV.—INTERNAL NAVIGATION IN IRELAND.

THE inland waterways of Ireland have an aggregate length of about 750 miles.

Of these the most important is the Shannon, which from its source at the base of the Cuilceagh Mountain, in the north-west of Cavan, to its debouchure into the Atlantic, between Dunmore Head in Kerry, and Kerry Head in Limerick, flows 234 miles, over 200 miles being navigable. The banks of the Shannon afford to Ireland the advantage of an inland coastline exceeding 450 miles. The Shannon traverses no fewer than eleven counties:—Cavan, Leitrim, Roscommon, Longford, Westmeath, King's County, Galway, Tipperary, Clare, Limerick, and Kerry. On its banks, or in close proximity, are the towns of Leitrim, Carrick, Jamestown, Longford, Lanesboro', Roscommon, Athlone, Ballinasloe, Banagher, Portumna, Skariff, Nenagh, Killaloe, Limerick, Ennis, Clare, Tarbert, and Kilrush. Below Limerick, to the sea, it forms a magnificent estuary, varying in breadth from one to eight miles, and enabling vessels of 400 tons to lade at Limerick. The total fall of the river is 146 feet 10 inches. Though many improvements have from time to time been effected in the navigation of the Shannon, they have not been part of a general plan. In relation to the advantages which would result, a comprehensive scheme of improvement could be carried out at a comparatively small outlay, and is well worthy of the attention of the Government. The improvement of this great artery and the construction of short lateral canals would, besides cheapening the transit of produce, be of great service in drainage. The outlay of two or three millions sterling in Ireland in the development of navigation and drainage would be attended with surprising results in the impetus it would give to the material prosperity of the sister country, and bring about changes which are outside

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the functions of legislation. Among other navigable rivers in Ireland are the Liffey, the Slaney, the Barrow, the Suir, the Blackwater, the Lee, the Foyle, the Bann, the Lagan, and the Newry.

The principal artificial waterways in Ireland are the Grand, Royal, and Ulster Canals. The Grand Canal extends from Dublin, and stretches westwards to the Shannon, which it joins at a point just above Banagher, the distance from Dublin being 85 miles. It is continued from the western bank of the Shannon to Ballinasloe, a further distance of 14 miles. About 30 miles from Dublin a branch canal from the south bank of the main line extends to Athy, where it joins the Barrow, the distance being about 27 miles. From the Athy branch there are other branches to Portarlinton, Mount Mellick, and some other places. The total length of the main line and its branches is about 164 miles. The dimensions of the canal are: depth, 6 feet; bottom width, 24 feet; surface width, 40 feet. The summit level is 278 feet above the sea level in Dublin Harbour. The canal was begun as a private enterprise, but the Government had to advance the funds to complete the works. The total outlay exceeded £2,000,000. This canal would have been better laid out had it joined the Shannon at Limerick, which would have avoided the Upper Shannon, of which the navigation is difficult. Owing to the route adopted, the great Bog of Allen had to be crossed, at a very large outlay. By the continuation of the Grand Canal to Limerick the Bog of Allen would have been avoided.

The Royal Canal was begun in 1789. This canal also connects Dublin with the Shannon, which river it joins at a point about five miles above Lough Ree. It proceeds in a westerly direction trending to the north. Including a branch line from Kiltashee to Longford of five miles, the total length of the Royal Canal is 97 miles. Its summit level is 307 feet above the sea level in Dublin Harbour. Its depth and width are the same as the Grand Canal. It cost about £3,000,000. Neither of these canals has been successful in the sense of an investment. They were both injudiciously planned, both too large for the requirements, and too proximate to each other.

The Ulster Canal connects the Blackwater, which flows into Lough Neagh, with upper Lough Erne, the length being about thirty-five miles.

A canal about twelve miles in length extends from Lisburn to Lough Neagh, by which, with the river Fagan, which flows into Belfast Lough, a through water communication is effected between Belfast, Lisburn, and Lough Neagh.

Lough Neagh is connected with the Irish Sea by the Newry Canal, about eighteen miles in length, which commences in the River Bann at Portadown and joins the River Newry just above the town of Newry.

An important river improvement has been carried out on the Liffey in order to improve the access to the Port of Dublin, which is situated near its mouth. The upper part of the channel was straightened, deepened, and embanked. Afterwards a jetty of rubble stone was constructed on the south side of the river. This jetty, which is about three miles three furlongs in length, was completed in 1796, and is called the Great South Wall. The object of this jetty was to straighten the outer channel. This object was fulfilled, and the action of the tidal scour somewhat increased the depth of the channel. The depth of the bay in front of the outlet of



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the channel over what is known as the Dublin Bar remained unaltered. In order to increase the depth over the Bar another jetty of rubble stone was commenced in 1820 on the north side of the river; the jetty, which is known as the Greath North Wall, is about one-and-three-quarter miles long, and was completed in 1825, and along its outer part it is only raised to half-tide level. From these works, together with dredging, very satisfactory results have accrued. Ten years after the completion of the North Wall the Bar had been lowered 5 feet, in 1861 the depth had increased by 7 feet, and in 1873 was nearly 10 feet, giving 16 feet of depth of the Bar at low water of spring tides. A further improvement is gradually developing.

Imperfect as the waterways of Ireland certainly are, excellent results are to be credited to them, as will be evident from the subjoined extract from the report of a Committee of the House of Commons which was appointed in 1830 to inquire into the state of the poor in Ireland. The Committee stated:—"The effect of opening lines of inland navigation, when formed upon scientific principles, and executed with due economy, has been, on the concurrence of all testimony, the extension of improved agriculture, the equalisation of the prices of fuel and provisions in different districts, the diminishing of the danger of, in both of these necessities of life, and advancing the general improvement of the condition of the people, by the creation of a new, vigorous, and continued demand for labour."

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#### V.—INLAND NAVIGATION IN FRANCE.

**T**HE first canal constructed in France was the Brière Canal. It was commenced in the reign of Henry IV. in 1605, and completed in 1642 under his successor, Louis XIII. It is  $34\frac{1}{2}$  miles in length, and has locks and a summit level. This waterway commences at Brière, on the River Loire, and passing on to Montargis proceeds to a junction with the Orleans Canal, and falls into the Seine at Fontainebleau. The Orleans Canal was completed in 1675. The chief characteristic of the principal French canals is the connection of rivers by surmounting the water-parting which intervenes, thus making a considerable chain of navigation. Examples of such canals are the Besançon, which joins the Saône, and consequently the Rhone to the Rhine. It stretches from the Saône, a little above St. Jean de Losne, by Dole, Besançon, and Mulhouse, to Strasburg, a distance of some 200 miles. The St. Quentin Canal joins the Scheldt and the Somme. This canal is 28 miles in length, and was completed in 1810. The Canal du Centre places the Loire and Saône in connection. The Bourgogne Canal connects the Seine and the Rhone. The Languedoc Canal, now known as the "Canal du Midi," or the "Canal des deux Mers," discharges the important function of completing the chain of navigation between Narbonne on the Mediterranean and Bordeaux on the Bay of Biscay. The rivers Gironde and Garonne are navigable as far as Toulouse, the Languedoc Canal extending from that place to Narbonne, on the Gulf of Lyons, its length, exclusive of branches, being about 140 miles. This canal was first projected in the reign of Francis I.; it was, however, begun and completed in the reign of Louis XIV. The works were commenced in 1666, and finished in 1681. The cost was £1,440,000.



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It was planned and executed by Riquet, the eminent French engineer, upon whom the work reflects great credit. It has 114 locks, the dimensions of which are 102 feet in length, and 19 feet 8 inches in width; the depth is 6 feet 7 inches. There are 55 aqueducts required to cross the various streams in its course, and it is crossed by 118 bridges. The summit level at Nauvouse is 610 feet above the Mediterranean. The Languedoc Canal was the first in which tunnels were used. This waterway was constructed for the accommodation of sea-going vessels. The conditions of ocean traffic are no longer what they were at the time of its construction. It is contemplated to accommodate the through navigation from the Mediterranean to the Bay of Biscay to modern requirements. The mileage of canals and canalised rivers in France in 1872 was 3,123 miles; the mileage of navigable rivers, and canals classed as rivers, was 3,534 miles; the total mileage of internal navigation in 1872 being 6,657 miles. The cost of construction has been :—

|                  |                    |
|------------------|--------------------|
| For canals ..... | £32,738,715        |
| For rivers ..... | 14,557,152         |
|                  | <u>£47,295,867</u> |

Distribution of the expenditure on canals and rivers respectively :—

|                                         | Periods.             | Canals.            |    | Rivers.            |
|-----------------------------------------|----------------------|--------------------|----|--------------------|
| By the State.....                       | Previous to 1800.... | £4,642,828         | .. | £800,000           |
|                                         | 1801 „ 1813....      | 1,639,428          | .. | 400,000            |
|                                         | 1814 „ 1830....      | 4,526,972          | .. | 445,607            |
|                                         | 1831 „ 1847....      | 9,884,928          | .. | 5,037,456          |
|                                         | 1848 „ 1851....      | 490,053            | .. | 1,242,163          |
|                                         | 1852 „ 1859....      | 876,477            | .. | 2,293,636          |
|                                         | 1860 „ 1868....      | 1,173,128          | .. | 4,538,290          |
| By Private Companies..                  | 1801 „ 1868....      | 4,924,457          | .. | —                  |
| Jointly by State and<br>Companies ..... | 1801 „ 1868....      | 4,580,444          | .. | —                  |
|                                         |                      | <u>£32,738,715</u> |    | <u>£14,557,152</u> |

Average cost per mile :—

|                        |         |
|------------------------|---------|
| Canals .....           | £10,500 |
| Canalised rivers ..... | 4,000   |

Annual volume of inland water traffic :—

|                                        | Ton-Miles.  |
|----------------------------------------|-------------|
| Traffic conveyed upon the canals ..... | 835,113,017 |
| Traffic conveyed upon the rivers ..... | 383,359,100 |

Cost of Maintenance :— 1,218,472,117

Average yearly cost of maintenance of canals between

1839 and 1868..... £92. 14s. per mile.

Average yearly cost of maintenance of rivers ..... £34. 7s. per mile.

Cost of Transport :—

Toll payable for the use of the canal.... ·588 of a penny per ton per mile.

Carriage, for use of boat and haulage .. ·238 of a penny per ton per mile.

·826 of a penny per ton per mile.

Toll payable for the use of the rivers.... ·518 of a penny per ton per mile.

Carriage for use of boat and haulage.... ·324 of a penny per ton per mile.

·842 of a penny per ton per mile.

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On canals and rivers the combined charges for toll and carriage amount to about four-fifths of one penny per ton per mile.

Most of the canals in France have, as will be seen from the statement of expenditure, been constructed during the nineteenth century. At the end of the eighteenth century only some 600 miles of canals were completed. Of the 2,500 miles since constructed, about one-half were executed between 1831 and 1848.

In 1872 and 1874 commissions were appointed to inquire into the economy of inland navigation in France. As the result of the inquiries, the commission recommended the construction of an additional mileage of 1,817 miles as being essential to the completion of the inland water communication of France. The estimated outlay for completing and perfecting in the manner felt to be necessary by the Commission is £33,300,000, of which £17,400,000 is required for works immediately necessary. Of this £6,000,000 is applicable for improvements, and £11,400,000 on extensions, leaving £16,000,000 to be eventually expended.

The following extracts from the Report to the French Government will afford an instructive account of the feeling in France with regard to inland navigation :—

*Excerpta* from “Report on Internal Navigation,” by the commission appointed to inquire into railways and other means of communication, by M. Krantz, member of the National Assembly :—

“Water carriage cannot boast of speed, and therefore in this respect it will be almost always outrivalled by rail carriage. But it still possesses advantages in cheapness and in greater power for the transport of bulky articles.

“Compelled to carry passengers and goods at different speeds, railways have not an unlimited power of transport. That their very costly apparatus, combined with comparatively so few stopping places, will not admit of any considerable expansion beyond the present traffic, has been made evident by the crisis from which the country has scarcely yet emerged.

“On the other hand, without being exactly unlimited, the power of water carriage is capable of much greater extension. Owing to the facility with which its less-costly plant can be increased, and to the ability with which boats can be stopped everywhere and anywhere on their course, water carriage possesses two special advantages, by which, even at the present day, it is enabled to play an important part in contributing effectively to agriculture and other industries, as well as, in certain cases, competing successfully with railways.

“In summing up its detailed inquiries, your Commission has drawn up a statement of what the country possesses, and what it still requires both as regards such works and expenditure as are more or less urgently required.

“Notwithstanding the endeavour of the Commission to frame low estimates, the figures at which it has arrived are still so large as to apparently exceed the capabilities of the present time. The country therefore is reduced to the dire alternative either of allowing its internal navigation to collapse, involving with it in a common ruin the enormous capital already set apart for its waterways, or else of imposing an intolerable burden on the public treasury.



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"France has been long enough led to think that its establishments and institutions are unrivalled, and that it has nothing to expect or to learn from other quarters. A cruel experience has put to flight these patriotic exaggerations, and has taught us that it is not desirable for a nation, any more than for individuals, to live apart in contemplation of or in admiration of its own works."

## VI.—THE GREAT WATER HIGHWAYS OF THE DOMINION OF CANADA.

CANADA possesses the finest natural inland navigable waterways in the world. There is, with the assistance of half-a-dozen short artificial canals, a continuous navigation from Fond du Lac, at the head of Lake Superior, to the Straits of Belle-Isle, Gulf of St. Lawrence, a distance of 2,384 statute miles.

### (a) DETAILS OF THE GREAT CANADIAN NAVIGATION.

| Section.                                                                                                      | Length in<br>Statute<br>Miles. |
|---------------------------------------------------------------------------------------------------------------|--------------------------------|
| Gulf and River St. Lawrence, from the Straits of Belle-Isle to the<br>head of tide-water (Three Rivers) ..... | 900                            |
| From Three Rivers to Lachine Canal .....                                                                      | 86                             |
| Lachine Canal .....                                                                                           | 8½                             |
| *Lake St. Louis .....                                                                                         | 15½                            |
| Beauharnois Canal .....                                                                                       | 11½                            |
| *Lake St. Francis .....                                                                                       | 32½                            |
| Cornwall Canal.....                                                                                           | 11½                            |
| St. Lawrence.....                                                                                             | 5                              |
| Farran's Point Canal .....                                                                                    | ¾                              |
| St. Lawrence.....                                                                                             | 10½                            |
| Rapide Plat Canal .....                                                                                       | 4                              |
| St. Lawrence.....                                                                                             | 4½                             |
| Iroquois and Galops Canal .....                                                                               | 7⅝                             |
| St. Lawrence (to Prescott) .....                                                                              | 7⅝                             |
| St. Lawrence (Prescott to Kingston) .....                                                                     | 59                             |
| St. Lawrence (Kingston to Welland Canal).....                                                                 | 170                            |
| Welland Canal .....                                                                                           | 27                             |
| Lake Erie .....                                                                                               | 625                            |
| Detroit River .....                                                                                           |                                |
| Lake St. Clair .....                                                                                          |                                |
| St. Clair River .....                                                                                         |                                |
| Lake Huron .....                                                                                              | 1                              |
| †Sault Ste Marie .....                                                                                        |                                |
| Lake Superior (to Fond du Lac).....                                                                           | 397                            |
| Collective length .....                                                                                       | 2,384                          |

\* Lakes St. Louis and St. Francis are merely expansions of the River St. Lawrence.

† The Sault Ste Marie Canal, uniting Lakes Huron and Superior, is not a Canadian work, being constructed on the United States side of the St. Mary's River.



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The St. Lawrence Canals are together  $43\frac{5}{8}$  miles long. These canals were completed between 1843 and 1848. There are 27 locks, with a total rise of  $206\frac{1}{2}$  feet. The Welland Canal is 27 miles long, and connects Lake Ontario with Lake Erie. It has 27 locks, with a total rise of 330 feet. It was opened in 1833. but only for small vessels. In 1867 it was enlarged to accommodate vessels of 400 tons. In 1871 it was decided to improve the canals between Montreal and Lake Erie, and in 1874 the works were commenced, and they are now approaching completion. The cost of the new works for the enlargement of the St. Lawrence Canals is estimated at £2,000,000, and the cost of the new works on the Welland Canal is estimated at £2,300,000. The bottom width is being made 100 feet and the depth 14 feet. The locks are being made 270 feet long, 45 feet wide, and of a depth of 14 feet of water over sills. The Port of New York views these extensive improvements of the great Canadian navigation with some degree of apprehension, "Canada has commenced," reports the State Engineer of New York, "and will in a few years complete the finest system of inland navigation in the world, which will make seaports of our lake cities. British steamers of nearly 2,000 tons will lie at the docks of Chicago and other lake ports unloading their merchandise or receiving their cargoes of grain, provisions, &c. The British will not have to tranship or elevate their grain; they can continue their voyage through Lake Ontario, the St. Lawrence, and the ocean, to Europe, only having to pay toll on the Welland Canal and on the river above Montreal" (*vide Fortnightly Review*, October, 1881). The importance of the St. Lawrence route to the lakes will be greatly increased by the enlargement of the short connecting canals. The St. Lawrence route between Lake Erie and Liverpool is 548 miles shorter than the route *viâ* the Erie Canal, the Hudson River, and the Port of New York. Any port on the great American lakes is 480 miles nearer to Liverpool by the route *viâ* Montreal than by the route *viâ* New York. The great Canadian navigation enables the connection in the least possible distance of the greatest food-producing area in the world with the greatest food-consuming country in Europe with the most speedy and economical communication which it is possible to provide.

## (b) THE RIDEAU CANAL.

THE Rideau Canal, which connects the River Ottawa at Ottawa City with the River St. Lawrence at Kingston, was constructed between 1826 and 1832, by the Imperial Government, mainly as a military necessity. The length of the canal is  $126\frac{1}{4}$  miles. It has 47 locks, with a total rise of  $282\frac{1}{4}$  feet up, and a fall of 164 feet down. The dimensions of the locks are, respectively: length, 134 feet; width, 33 feet; depth,  $4\frac{1}{2}$  feet to 5 feet; bottom width of canal, 54 feet to 60 feet; surface width, 80 feet. In the inter-communication between Montreal, Ottawa, and Kingston are several short canals, namely, the St. Ann Lock, the Carillon, the Châte à Blondeau, and the Grenville, with a collective length of only  $8\frac{1}{2}$  miles. These canals were constructed by the Imperial Government for military purposes.

## (c) THE RICHELIEU CANALS.

THE Richelieu Canals form a third series in the Canadian canal system. Entering the Richelieu River from the St. Lawrence at a point 46 miles below Montreal, and

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ascending towards Lake Champlain, the obstructions to navigation are overcome by the St. Ours Lock, and further on the Chambly Canal, extending to St. John's, a distance of 12 miles. These two are called the Richelieu Canals, after which the navigation is free from difficulties to the head of Lake Champlain, where the State of New York has the Whitehall Canal, through which access is obtained to the Hudson River and the Port of New York. The length of the Richelieu Canals is  $12\frac{1}{2}$  miles. There are 10 locks, with a total rise of 79 feet. The locks are 118 feet long, 23 feet wide, and 7 feet deep. The bottom width is 36 feet, and the surface width 60 feet. As an illustration of the interest manifested by the Dominion Government in the development of inland navigation, the estimates for 1887-88 include 2,000,000 dollars for improvements of canals.

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## VII.—NAVIGABLE WATERWAYS OF THE UNITED STATES.

THE principal waterways of the United States are the great rivers with which nature has endowed that extensive country. Chief among these are the Missouri and Mississippi Rivers, which together form the longest river in the world, being about 4,100 miles from the source of the Missouri in the north part of the Wind River Mountains, a member of the Rocky Mountains range on the confines of Montana and Idaho, to the debouchure of the Mississippi in the Gulf of Mexico, 105 miles below New Orleans, after flowing through eleven States or territories. An important improvement in the access to and from this magnificent highway was effected between 1875 and 1879 by the reduction of the bar at the South Pass mouth of the Mississippi. The depth of water over this bar was only 8 feet. Mr. Eads, a well-known American engineer, contracted with the United States Government to make a channel 30 feet deep through the outlet of the South Pass, for the sum of £1,052,000, and to guarantee its maintenance for twenty years for an annual payment of £75,000. The period which has elapsed since the works were finished is not sufficiently long to enable a judgment to be formed as to the permanency of the 30 feet channel. However, so far as can be determined, the results achieved in so short a period as five years are among the most remarkable successes of modern river engineering.

Among the principal navigable rivers of the United States are the Arkansas, the Ohio, the Red River, the Tennessee, the Illinois, the Hudson, the Delaware, the Susquehanna, the Potomac, the Savannah, the Rio Grande del Norte, the Rio Colorado, and the Oregon. The aggregate length of the navigable rivers of the United States is about 17,000 miles, and about 4,500 miles of navigable canals have been constructed.

The most important of the navigable canals of the United States is the Erie Canal, commenced in 1817, and completed in 1825. It extends from Buffalo, at the eastern extremity of Lake Erie, to Albany, where it joins the Hudson River, thus enabling a through inland navigation between Lake Erie and the Port of New York. The Erie Canal is 363 miles long. The canal, as first made, only accommodated



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barges of 60 tons. It has since been enlarged, and now accommodates barges of 240 tons. The original dimensions of the canal were 28 feet bottom width, and 40 feet surface width, and 4 feet in depth. The locks were 90 feet long, 14 feet wide, and 4 feet depth over sills. The present dimensions are 52 feet bottom width, 70 feet surface width, and 7 feet in depth. The locks are 110 feet long, and 18 feet wide, and 7 feet depth over dock sills. The original cost of the canal was £1,800,000, at the expense of the State of New York. Mc.Culloch, in a reference to American canals in his "Dictionary of Commerce and Commercial Navigation" (edition 1837), observes: "It has completely answered the views of its projectors, and will remain an example to the other States; fully justifying the encomiums that have been bestowed upon it." In an article on "The City of Buffalo," which appeared in "Harper's New Monthly Magazine" during 1885, it is stated: "In her new-found allegiance to the railway king, Buffalo does not forget her foster-mother. As a free highway the Erie Canal holds the balance of power. It regulates the transportation rates by rail, and preserves the supremacy of the great State of New York as the chief thoroughfare of commerce, a supremacy which the railways could not maintain unaided. The statistics of the past year show that the canal did as well as its rivals by rail or water, and has by no means, as has been intimated, survived its usefulness." From this reference it is obvious that the reputation enjoyed by the Erie Canal half-a-century ago has been fully maintained.

A branch canal, 38 miles in length, issues from the main canal near Syracuse, and extends to Oswego, at the eastern side of Lake Ontario. At Albany, the Champlain Canal, 66 miles long, commences from the Erie Canal, and places it in connection with Lake Champlain. By this communication New York is placed in connection by a through inland waterway with Quebec and Montreal, the Richelieu Canal in Canada extending from Lake Champlain to the River St. Lawrence. The cost of the Oswego Canal was £105,000. The Champlain Canal cost £236,000.

The Chesapeake and Ohio Canal was projected for the purpose of connecting the Potomac at the tidewater above Georgetown with the Ohio at Pittsburg, a distance of  $341\frac{1}{2}$  miles. Its dimensions are on the same scale as the enlarged Erie Canal. The canal was begun in 1828, and was completed as far as Cumberland, a distance of 186 miles, by 1850. No further works have been executed since that date. In 1875 surveys were ordered by the United States Government, and a report was made recommending the completion of the canal, and suggesting that the most practicable method of crossing the ridge of the Alleghany mountains would be the use of inclined planes, of which seventeen, with a total rise of 1,185 feet, would be required between Cumberland and the summit level. The summit level is to pass through a tunnel  $3\frac{3}{4}$  miles long, having a height of 28 feet, and a width of 46 feet, allowing traffic to pass in both directions. The descent on the western slope of the ridge, being more gradual, will be effected by six inclined planes and 56 locks. The inclined planes are to be on the principle of the Monkland Canal incline, near Glasgow, which has already been described.

The Illinois and Michigan Canal begins at Chicago, and terminates at La Salle, on the Illinois River, which flows into the Mississippi 40 miles above St. Louis, enabling



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a through inland water navigation between the great lakes and the Gulf of Mexico, a distance by river of about 2,000 miles. The dimensions of this canal are—bottom width, 40 feet; surface width, 60 feet; depth, 6 feet. It was completed in 1846.

The Illinois and Michigan Canal provides the necessary link in completing a through inland waterway from the Straits of Belle-Isle in the Gulf of St. Lawrence to the mouths of the Mississippi in the Gulf of Mexico; the total distance being about 4,000 miles, all of which is navigable from end to end.

The Morris Canal, 102 miles in length, extends from Philipsburg to New York, connecting the Delaware with the Hudson. The canal was completed in 1831, and an enlargement was completed in 1845. In 1860 the canal was again enlarged to accommodate boats of 80 tons. It crosses a spur of the Alleghany Mountains. The differences of level are overcome by 23 locks with a total lift of 225 feet, and 23 inclines with a total rise of 1,449 feet.

In "A General History of Inland Navigation," by J. Phillips, which was published about 1804, the author observes with reference to the inland waterways of the United States:—"The immortal Washington was the original father and promoter of these canals and improvements, and well did he deserve that admirable motto—'Twice the Saviour of his Country.' After conducting her to liberty, he opened her the way to prosperity by new roads and canals, and varying the produce of agriculture."

## VIII.—INLAND NAVIGATION IN RUSSIA.

PETER THE GREAT, the most enterprising Czar that ever governed Russia, having observed, whilst in Holland during his general tour of Europe, that the industrious Dutch had by diligent perseverance raised their small country, mostly a marsh, into a populous and powerful State, principally by means of canals, determined to make an inland navigation through Russia for the conveyance of the rich products of Persia to his newly-constructed city of Petersburg, now called St. Petersburg. These commodities were to be transported in the first instance by the Caspian Sea to the Port of Astrakhan, thence by the Volga, and a number of canals connecting the Volga with Lakes Novgorod and Ladoga, St. Petersburg being finally reached by the River Neva. This through communication, which is 1,434 miles without break, is called the Voshnei-Voloshok Canal. The Czar Peter commenced this undertaking in 1698, but did not live to see the complete realisation of his great project.

The traffic on the Volga exceeds 10,000,000 tons annually, and its value is computed at £22,000,000. The capital invested in steamers and barges is estimated at £8,000,000. The traffic is conducted by 650 steamers and 3,000 barges, with an aggregate capacity of 3,000,000 tons. Besides 3,000 permanent barges of 1,000 tons each, there are hundreds of temporary barges only built for the purpose of taking cargoes to Nijni Novgorod, and other Volga ports, and then broken up. Over 100

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temporary barges are made every year of from 300 to 500 tons, and 200 barges of from 5,000 tons to 8,000 tons. These huge barges carry as much as some of the largest ocean steamers. Owing to the Neva locks being too small to admit vessels more than 147 feet in length, more than 1,000 barges, about 100 feet long and from 200 to 300 tons capacity, are made every year simply to transport the goods from the Volga to the Neva. In addition to the large number of barges already mentioned, over 4,000 barges, wherries, and fishing boats are annually built on the Volga for the lower course of that river and the Caspian Sea. The central point of traffic on the Volga is Nijni Novgorod, where there is an annual turnover at the Great Fair of about £25,000,000.

With a short break of some 60 miles there is a continuous inland water route from the Northern frontier of the Chinese Empire to the Baltic Sea. The distance between St. Petersburg and Maitmatchin, on the confines of the Chinese frontier, is 4,472 miles. This town is 1,025 miles from Pekin. The total distance between St. Petersburg and Pekin is 5,497 miles, of which 4,412 miles can be accomplished by inland navigation. The goods exported by Russia to China are furs and peltry, leather, glassware, hardware, horses, and cattle. The imports of Russia from China are silk, tea, cotton, porcelain, rice, tobacco, and a variety of sundry products. On the opposite bank of the Selenga, on which Maitmatchin stands, is the Russian town of Kiatka, the two places really forming one town. Kiatka is the great entrepôt for the trade between the two empires, which is carried on in a long wooden building which is used as a market. All business terminates at sunset, when a bell is rung, and Russians and Chinese retire within their respective boundaries.

The Chinese transport their goods to Kiatka chiefly on camels. It is five days' journey from Pekin to the Great Wall of China, and 46 days' more to cross the great Mongol desert. From Kiatka the goods are conveyed by water by the Salenga River to Lake Baikal, after crossing which Irkutsk is reached, whence, by the Angara River, the town of Yeniseisk, on the Yenisei River, is arrived at. This town has an extensive trade in furs and Chinese produce. From Yeniseisk, the goods have to be conveyed 60 miles by land to Makoffskoi-Ostiog, whence they are carried on the Ket River to its confluence with the Obi River. At the confluence of the Irtish with the Obi, the Irtish is ascended as far as Tobolsk, which is a great centre for the trade between Europe and China. Just above Tobolsk the transport is continued from the Irtish by the Iset River, which is connected by a canal with the Tchusovaya River, which flows into the Kama River not far from Perm, the principal emporium of the Russian and China trade. The Kama River enters the Volga near to Kasan, the great entrepôt of the commerce between European Russia, Siberia, and Bokhara. The communication with St. Petersburg is completed by the through route already described as Vishnei-Voloshok Canal.

On the 27th May, 1885, the Emperor of Russia officially opened what is known as the Poutiloff Canal, which extends from the Fortress of Cronstadt, which is built on an island in the Gulf of Finland, to the port of Goutonyeff, on an island of that name at the mouth of the Neva, immediately in front of St. Petersburg. This canal, including about one mile of the Neva, which has been dredged, is 18½ miles in



length, with a branch of  $2\frac{1}{2}$  miles connecting it with the Catherinkoff mouth of the Neva, the total length being  $20\frac{1}{2}$  miles. The minimum bottom width of the Poutiloff Canal is 210 feet, and the depth 20 feet 6 inches. The amount of material removed in making the canal amounted to 14,500,000 tons. The cost of the works was 10,265,400 roubles, equal to £1,026,540. The canal was commenced in 1878, and finished in 1883. The cost of wharves at Port Goutouyeff was 2,618,580 roubles, or about £261,858. The canal has been provided at the cost of the Russian Government, and no charge is made for the use of it. A small charge is made for the use of the wharves at Goutouyeff and Poutiloff. The object of the canal is to afford direct access to St. Petersburg, as, previously, all large vessels had to load or discharge in Cronstadt Roadstead.

In 1887 the Russian Government raised 25,000,000 golden roubles (about £2,500,000) for the construction of a maritime canal through the Isthmus of Perekop, which connects the peninsula of the Crimea with the mainland of Russia. M. Louis Coiseau, one of the principal engineers of the Suez Canal, has been appointed to direct the works. The Perekop Canal will afford a direct communication between the Port of Odessa, the great emporium of Southern Russia, and the Sea of Azov. It shortens the voyage between Odessa and Taganrog, which is the port for the outlet of the produce of the extensive area which the River Don traverses, by about 200 miles. Military considerations have influenced the Russian Government, as well as commercial interests, to undertake this enterprise.

The project for connecting the White Sea with the Baltic Sea by a direct canal by way of Lake Onega, which dates back to the time of Peter the Great, is being seriously considered by the Russian Government. These seas are connected by a system of inland navigation, but it is very circuitous. The River Dwina is navigable, with its tributary the Sukhona, from Archangel to a point near Vologda. Thence the navigation is continued by canals, which connect Lakes Kubinskai, Bielo-Zersk, Onega, and Ladoga; thence by the Neva to the Gulf of Finland, which is an arm of the Baltic Sea. The new route would only be about one-third of the length of the existing one, which is about 1,500 miles. The canal which is contemplated by the Russian Government is intended to provide for barges of about 100 tons. The estimated cost is £750,000.

A new canal, improving the communication between the Caspian Sea and the Baltic, has been constructed by the Russian Government, and was opened in July, 1886. The outlay has been £300,000. It joins the Rivers Wyhegra and Kovja, and forms a fresh link in the chain of waterways connecting the Neva with the Volga. Its length is 22 miles; surface width, 70 feet; depth, 7 feet.

A project for connecting the Volga and the Don by a canal has been approved of by the Russian Government. The estimated cost is £2,800,000. The length will be about 53 versts. The canal will take 70 hours to traverse, and will accommodate vessels 210 feet long, 42 feet broad, and 7 feet draught, the maximum tonnage being 500 tons. There will be 13 locks, each large enough to contain two of the largest vessels at the same time.



## IX.—INLAND NAVIGATION IN SWEDEN.

## THE GOTHIA NAVIGATION.

THE connection of the Cattegat and the Baltic by an internal navigation long engaged the attention of the people and Government of Sweden, who had urgent reasons for entering upon such an enterprise. The Sound and the other channels to the Baltic being commanded by the Danes, they were able to annoy the Swedes by preventing any communication by sea between the eastern and western provinces of the kingdom. Partly with the object of remedying this source of annoyance and partly to afford greater facilities for the conveyance of iron, timber, and other heavy goods from the interior to the coast, it was determined to form an inland navigation from Soderköping on the Baltic to Gothenburg on the Cattegat.

The first step in this great project was completed in 1800 by the perfection of the navigation of the River Gotha, which flows from Lake Wener to Gothenburg. The most serious obstacle which had to be overcome was the cataracts which obstruct the Gotha at Tröllhætta. To avoid these cataracts a short lateral canal some three miles in length was made to accommodate vessels of 150 tons. This canal cost about £80,000. Lake Wener was afterwards connected with Lake Wetter by the Gotha Canal, and the navigation was continued to Soderköping partly by lakes and canals. The distance from Gothenburg to Soderköping is about 300 miles, of which fifty-six miles of navigation is effected by canals, the rest being the lakes. In 1844 the engineer Ericsson enlarged the locks (of which there are eleven) to 120 feet in length and 23 feet in width.

A canal has also been made which unites Lake Hielmar with Lake Maelar; this waterway is called the Canal of Arboga. Another canal, that of Stroemsholm, so called from its passing by the castle of that name, effects a navigable communication between the province of Dalecarlia and the Lake Maelar.

## X.—INLAND NAVIGATION IN ITALY.

IN modern Europe the Italians appear to have been the first people to have undertaken the construction of canals. The primary object of the canals made by the Italians was irrigation. Many works of this class were executed in the Milanese and other parts of Lombardy during the eleventh, twelfth, and thirteenth centuries. These canals are still regarded as models, and excite the admiration of all capable of appreciating works of this class. In 1271 the Italians made the Navaglio Grand Canal navigable, which connects Milan with the Tesino. The invention of the pound lock, which has effected a considerable revolution in inland navigation, is believed to have originated in Italy. The latest development in irrigation work in Italy is the Cavour Canal, commenced in 1862, and completed at a cost of £4,104,000. It extends from the River Po, and terminates in the River Tesino. It has a total fall of 71 feet, and is 51 miles long.

## XI.—INLAND NAVIGATION IN SPAIN.

NOWHERE are canals more necessary than in Spain, whether for the purpose of navigation or of irrigation, but very little has been done with either object in that country. Although the Moors carried out works for irrigation in the ninth and tenth centuries, and Charles V. commenced the Aragon Canal in 1528, nothing of consequence was effected in canals until the end of the eighteenth century, when the Aragon Canal was completed.

During the reign of Charles II. a company of Dutch contractors offered to render the River Manzanares navigable from Madrid to where it falls into the Tagus, and to make the Tagus navigable to Lisbon, provided they were conceded the right to levy a duty on the goods conveyed upon this navigation for a certain period. The Council of Castile seriously considered this proposal, and after maturely weighing the matter pronounced the extraordinary decision—"That if it had pleased God that these two rivers should have been navigable, He would not have wanted human assistance to have made them such, but that, as He has not done it, it is plain He did not think it proper that it should be done. To attempt it, therefore, would be to violate the decrees of His Providence, and to mend the imperfections which He designedly left in His works."

The Ebro Canal, begun under Charles V., is the most important of the Spanish canals. It goes from Tudela to below Saragossa. The Ebro Canal, however, has not been completed to Sastago, where it was intended to join the Ebro.

The Canal of Castile was undertaken to facilitate the conveyance of grain from the interior to Santander and Bilbao, but was not completed to the extent intended.

Two irrigation canals were made in Spain between 1863 and 1868. One, the Henares Canal, 28 miles in length, is capable of irrigating 27,000 acres. The other, the Esla Canal, is capable of irrigating 32,000 acres, although the cost of its construction was only half of that of the Henares Canal.

## XII.—INLAND NAVIGATION IN HOLLAND AND BELGIUM.

THE construction of the canals in Holland and Belgium commenced as early as the twelfth century, and in Holland the canal system has received more development than any other country. The waterways were the principal factors in making Flanders become the great entrepôt of commerce between the North and South of Europe, and the city of Bruges was second to none in Europe as a great commercial emporium. The canal system of Holland gave that small country an importance in Europe in the middle ages which was remarkable when the small extent of that country is taken into account. The canals of Holland are generally 60 feet wide and 6 feet deep. Being for the most part without locks, except at their outlets, they almost realise in perfection the requirements of inland navigation. In Holland the canals are really the great highways of the country. All the canals of



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Holland are bordered with dams or banks of immense thickness, and on these depends the security of the country from inundation. It is therefore a matter of the highest importance to keep the works in the most efficient state of repair. To effect this there is an organised body of men, and in every village a magazine of the stores of the necessary materials for repairs, and these are conveyed in carts to any damaged place on immediate notice. When a certain bell rings or the waters rise to a fixed height, every man repairs to his post. To every house or family there is assigned a certain part of the bank in the repair of which they are to assist. When a breach is apprehended, they cover the bank all over with cloth and stones.

Amsterdam is essentially a canal city. Its canals are as numerous as its streets, and intersect the city in all directions. It is connected with the North Sea by two ship canals on the North Holland Canal 51 miles in length, extending to the Helder. This canal was completed in 1825. Its bottom width is 36 feet, its surface width 124 feet, and its depth 20 feet 9 inches. The only locks are the tide locks at its extremities.

In 1876 a shorter and more capacious ship canal was made from Amsterdam to Yumiden, on the North Sea. It is only  $15\frac{1}{2}$  miles in length, as compared with 51 miles of the old canal.

The bottom width of the canal is  $88\frac{1}{2}$  feet and the depth 23 feet. In the construction of the canal the amount of material excavated was 21,000,000 cubic yards. The cost of the work was about £3,000,000.

Great river improvements have been carried out on the Maas, on which the Port of Rotterdam stands. The depth has been increased to about 20 feet. The tonnage of Rotterdam increased owing to the improved facilities from 2,330,000 tons in 1869 to 3,463,000 tons in 1875.

Owing to great improvements in the Scheldt the Port of Antwerp has increased very rapidly in the growth of its traffic, the particulars of which have been already given in this article.

To shorten the access to the Port of Ghent, the Ghent-Terneuzen Ship Canal has been made, the results of which have been eminently satisfactory. It is 21 miles in length. The bottom width is  $55\frac{1}{2}$  feet, the surface width  $173\frac{1}{2}$  feet. The depth varies from 19 feet 10 inches to 22 feet 5 inches.

### XIII.—INLAND NAVIGATION IN GERMANY AND AUSTRIA.

THE German States are traversed by the great navigable rivers the Elbe, the Oder, the Vistula, the Weser, the Ems, and the Rhine, and a number of canals connect these rivers.

The Imperial Government have recently voted a large sum towards the provision of a canal to connect the Rhine with the Ems, to be called the Westphalian Canal. The Government subscription to the cost is conditional on the districts interested acquiring the necessary land. The money for this purpose is in course of subscription



by the districts concerned. The canal, which would pass through the Westphalian Coalfield, is intended to bring German coal into closer competition with English coal at the North Sea and Baltic Ports. By this canal, and the new Baltic Canal, coal will be able to be placed at the Baltic Ports at the same price as English coal. As the distance from Emden to the Baltic will be thirty hours' less voyage than from Newcastle, this will mean serious competition with English coal.

The Holstein Canal joins the River Eider, and enables a communication from the Port of Kiel, on the Baltic, with the North Sea. By this passage of about 100 miles, vessels save the detour round the Peninsula of Jutland and through the Cattegat and the Sound. The bottom width is 51 feet 6 inches, and the surface width 95 feet. The depth is 9 feet 6 inches. Its highest elevation above the sea-level is 24 feet 4 inches. This elevation is overcome by six locks. The canal portion of the route is 26 miles in length. It was opened in 1785, at a cost of £500,000. It was made for the accommodation of vessels of 120 tons, or of greater tonnage if of special build. The dues are very moderate. The smaller class of vessels have largely availed themselves of the facilities of the Holstein Canal.

When the Holstein Canal was made, the province of Schleswig-Holstein formed part of the kingdom of Denmark. In 1864 this province was annexed by Prussia, and now forms part of the German Empire. The German Government have commenced the construction of a new maritime canal, which will connect the North Sea and the Baltic by a shorter route than the Holstein Canal affords. This canal, which is known as the Baltic Canal, was formally inaugurated on the 3rd of June, 1887, by the Emperor of Germany, who laid the first stone of a lock on the intended canal on that day.

Although the Baltic Canal will confer material advantages upon commerce, military and naval exigencies were put forward as the primary motive for its construction in the *Exposé des motifs* attached to the Bill when sanctioned by the German Reichstag. Its cost will be considerably enhanced by the outlay on fortifications for its security. The total outlay is estimated at £7,800,000, of which £400,000 will be required for military works.

The canal will be 53 nautical miles in length. Bottom width 26 metres (about 80 feet), surface width 60 metres (about 185 feet), depth 8·5 metres (about 26 feet). The time of passage through will be about 10½ hours. The dues payable are fixed at about 9d. per ton. It is expected that out of 35,000 vessels which annually pass, 18,000 will prefer to use the canal. The general economy of distance will be relatively much more to the advantage of German than to English shipowners.

The River Danube traverses the Austrian Empire through its whole extent, and is a most important waterway. Two pretty extensive canals have been constructed in Hungary. One is called the Bega Canal—it stretches from Fascet to Beckserek, where vessels pass by the Bega River into the Theiss, just above its junction with the Danube; it is 73 miles in length. The other Hungarian canal is called the Francis Joseph, after one of the Emperors. It extends from the Danube by Zambor to the Theiss, which it joins near Foldvar, being 62 miles in length. Another canal, the Vienna Canal, connects that city with Neustadt.

## XIV.—INLAND NAVIGATION IN INDIA.

INLAND water traffic in India, other than that conveyed on the great rivers, is principally carried on the canals for irrigation, which, in the great Deltas, have been adapted for navigation also. Some of the large irrigations in the North-West Provinces and the Punjaub have also been furnished with locks. As, however, the same amount of attention has not been devoted as has been in the Deltas, there have not been equal traffic results. A few canals have been constructed solely for navigation.

The Buckingham Canal, which runs from the town of Sadras along the coast and through the city of Madras to the Pulicat Lake, is a canal primarily intended for navigation purposes. The canal is continued northwards until it meets one of the main navigation lines of the Kistna-Delta scheme. The communication along the Delta Canal up to the great weir across the Kistna, thence by the high level line by the Kistna and Godavery Systems to the Port of Cocanada. The line affords a continuous route of 456 miles. Every variety of boat ranging from 3 tons to 80 tons is to be found on this navigation. The section of the canal varies a good deal, but the locks are all of the same dimensions, 150 feet long, 20 feet wide, and 5 feet depth over sills.

In connection with the Buckingham Navigation there is also a large canal connecting the Toomabudra River with the Pennar River.

In Bengal, a very large traffic is carried on through the various creeks that connect the Ganges and the Brahmapootra with the Hooghly. These natural lines are connected by two main artificial canals. One is called the Circular, or Baliaghatta Canal. The other is known as Tolley's Nullah.

The Calcutta Canal route for boats extends eastwards 115 miles, to Khoohia. The traffic by this, known as the Sunderbund route, in 1873 was 811,000 tons. In 1873, over 700,000 tons of traffic passed between Calcutta and the Ganges by the Naddea Rivers. The Orissa Canals, when completed, will be 500 miles in length, but the present navigable portion is only 162 miles. The Midnapore Canal, which connects Midnapore with Calcutta, is one of the Orissa series, and is 70 miles in length. Another of the Orissa Canals is the Hidgellee Canal, cut for the purpose of enabling boats to avoid the lower reaches of the Hooghly. This canal is 29 miles long, but when completed will afford a safe inland navigation between Calcutta and Cuttack, a distance of 250 miles. The ton mileage in 1882 on these canals was 13,500,000.

The Sone Canal system forms part of the Bengal scheme of irrigation and navigation. The collective length of the Sone Canals is 217 miles. The ton mileage on the Sone Canals in 1882 was 4,033,893. The Indian Government runs steamers on the Sone Canals, and will continue to do so until the task is taken up by private enterprise.

The largest irrigation canal in India is the Ganges Canal. It was opened in 1854, and is 650 miles in length. In 1866 an extension called the Lower Ganges Canal was commenced, the length being 582 miles. The total outlay on the two canals has been about £6,800,000.



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The other principal canals in the North-West Provinces are the Agra and Eastern Jumna Canals. The main line of the Agra Canal is 142 miles in length. The cost was £804,000. The Eastern Jumna Canal was first made by the native rulers in the seventeenth century. It was renovated by the British Government in 1830, and further improved in 1854.

The Bari Doub, Sirhind, and Western Jumna Canals, in the Punjaub, are important works. The Western Jumna Canal was first commenced in the fourteenth century. Its restoration in 1817 was the first irrigation work of the English Government, which has renovated 290 miles of the old canals and added 143 miles of new canals.

There is a considerable canal for navigable purposes along the Malabar coast.

The subjoined figures show the annual expenditure of the Government of India upon irrigation and navigation works in the course of each year, from 1875 to 1884:—

|            |          |            |          |
|------------|----------|------------|----------|
| 1875 ..... | £663,000 | 1880 ..... | £668,000 |
| 1876 ..... | 776,000  | 1881 ..... | 709,000  |
| 1877 ..... | 615,000  | 1882 ..... | 789,000  |
| 1878 ..... | 753,000  | 1883 ..... | 901,000  |
| 1879 ..... | 631,000  | 1884 ..... | 751,000  |

## XV.—THE SUEZ CANAL.

THE Suez Canal extends from Port Said, in the Bay of Pelusium, on the Mediterranean, to Suez, on the Red Sea. It is 99 miles in length, the depth is 26 feet, the bottom width 72 feet, and the minimum surface width 196 feet. This width only allows of one vessel passing along the canal, so that "gates," or sidings, have been formed to allow of vessels passing each other. The Suez Canal Company is an Egyptian company authorised by a decree of the Viceroy of Egypt, dated January 5, 1856, and confirmed by a firman of the Sultan of Turkey, dated March 19, 1866. The concession is for 99 years from the date of opening. The works were commenced in 1860, and the canal was opened on November 17, 1869. There are no locks, the canal being level from sea to sea. The total capital, share and loan, is 357,062,115 francs. Of the 400,000 original shares of 500 francs, 176,602 shares were subscribed by the Khedive of Egypt. These 176,602 shares were purchased from the Khedive by the British Government in November, 1875, for the sum of £3,976,582. The Khedive has to pay 5 per cent to the British Government until July 1, 1894, on the amount of these shares. The Khedive had entered into an arrangement alienating his interest in the dividend from the Suez Canal Company for a period of 25 years, from July 1, 1869. These 500-franc shares, expressed in English money, are about £20 each. In 1885, the highest quotation on the London list was 88½, the lowest 71½, and the latest 87½.

This splendid monument of engineering skill has proved a great commercial success. The annual tonnage passing through it far exceeds the most sanguine predictions of its promoters; thus, notwithstanding that the project of the Count de Lesseps was considered a purely chimerical one, it has become an accomplished fact, and has revolutionised the whole system of our commerce with the East, and



## INLAND NAVIGATION.

causing an expansion of traffic which is unparalleled in the history of any similar enterprise. The traffic has attained to such proportions that the Suez Canal Company contemplate doubling the width of it, so as to allow of vessels to pass both ways simultaneously.

The following figures show the remarkable expansion of the traffic through the Suez Canal :—

TABLE SHOWING INCREASE IN TRAFFIC AND EARNINGS ON SUEZ CANAL :—

| Year.      | Number of<br>Vessels. | Aggregate<br>Tonnage. | Receipts. |
|------------|-----------------------|-----------------------|-----------|
| 1870 ..... | 486 .....             | 435,911 .....         | £206,372  |
| 1871 ..... | 765 .....             | 761,467 .....         | 359,749   |
| 1872 ..... | 1,082 .....           | 1,439,169 .....       | 656,303   |
| 1873 ..... | 1,173 .....           | 2,085,072 .....       | 885,392   |
| 1874 ..... | 1,264 .....           | 2,423,672 .....       | 994,375   |
| 1875 ..... | 1,494 .....           | 2,940,708 .....       | 1,155,452 |
| 1876 ..... | 1,457 .....           | 3,072,107 .....       | 1,198,999 |
| 1877 ..... | 1,663 .....           | 3,418,499 .....       | 1,310,973 |
| 1878 ..... | 1,593 .....           | 3,291,535 .....       | 1,243,928 |
| 1879 ..... | 1,477 .....           | 3,236,942 .....       | 1,187,440 |
| 1880 ..... | 2,026 .....           | 4,344,519 .....       | 1,593,617 |
| 1881 ..... | 2,727 .....           | 5,794,401 .....       | 2,050,974 |
| 1882 ..... | 3,198 .....           | 7,122,125 .....       | 2,421,834 |
| 1883 ..... | 3,307 .....           | 8,051,307 .....       | 2,740,933 |
| 1884 ..... | 3,284 .....           | 8,319,967 .....       | 2,596,924 |
| 1885 ..... | 3,624 .....           | 8,985,411 .....       | 2,589,818 |

## XVI.—THE PANAMA CANAL.

THE Panama Canal Company, of which the Count de Lesseps, the founder of the Suez Canal, is the leading promoter and president, was constituted on March 3, 1881, to construct a maritime canal for the connection of the Atlantic and Pacific Oceans by cutting through the Isthmus of Panama. The concession is granted by the United States of Colombia for ninety-nine years from the opening of the canal. The paid-up share and loan capital of the Panama Canal Company in 1885 amounted to 646,841,075 francs. The Count de Lesseps has recently stated that the canal will be in operation in 1890, although the works will not then be entirely completed.

The canal commences in the Bay of Limon on the Atlantic, and follows the valley of the Chagres River to Matachin, then goes along the valley of the Obispo River, and crosses the Cordilleras by a deep cutting of 300 feet through the Culebra Pass. Thence its course is along the valley of the Grande River, until it debouches, near Panama, in the Pacific, opposite to the Island of Perico.

The canal will be 47 miles in length. The bottom width of the canal will be 72 feet, same as the Suez Canal. In the Culebra cutting, however, the bottom width will be 78½ feet for a distance of 15½ miles. The depth of the canal will be from 26 feet to 29½ feet. As there is a tidal range from 8 feet to 21½ feet at Panama, a tidal lock will be made at that end of the canal to prevent excessive fluctuation. This will not be necessary at the Colon end, as in the Bay of Limon the range is very small, being only from 7½ inches to 1 foot 7 inches.

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Since the above was written, the Count de Lesseps has decided, instead of making the cutting through the Culebra Pass, to construct an elevated basin to be approached by locks. The Count gives the assurance that the original estimate of £48,000,000 will not be exceeded by more than £12,000,000, making the total cost £60,000,000.

The Panama route was adopted at an International Congress held in Paris in 1879. A scheme, known as the Nicaragua route, which would require 21 locks and be 180 miles in length, was rejected because of its length, the number of locks, and the site being subject to earthquake disturbance. Another route which was considered, the San Blas route, only 30 miles in length, was put aside because of a tunnel seven miles in length and bad harbour site on the Pacific side. A fourth route, the Atrato route, 149 miles in length, but only 31 miles of canal required. It would, however, require locks and a tunnel, and there were several other objections to its adoption. As, however, a canal along the Nicaraguan route has been sanctioned by the Nicaraguan Government, and a concession has been granted to an American company, which is busily engaged in making the necessary surveys, there is every probability of a second inter-oceanic canal between the Atlantic and the Pacific. The estimated cost of the Nicaragua Canal is 50,000,000 dollars.

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LIST OF AUTHORITIES CONSULTED.

- Report from the Select Committee on Canals (Commons, 1883).  
 Parliamentary Return relating to Inland Navigation and Canal Companies in England (1870).  
 Historical Account of Inland Navigation and Railroads of Great Britain. By J. Priestley (1837).  
 A Treatise on Rivers and Canals. By L. F. Vernon-Harcourt, M.A.; M.I.C.E. (1882).  
 Canals. By Marshall Stevens, F.S.S. (British Association, 1886.)  
 Statistics relating to Railways and Canals. By Samuel Salt, Manchester (1845).  
 British Railways and Canals. By "Hercules" (1885).  
 A General History of Inland Navigation. J. Phillips (1804).  
 Eightieth Report of the Commissioners of the Caledonian Canal (1885).  
 The River Clyde. By James Deas, M. Inst. C. E. (1876).  
 Accounts of the Trustees of the Clyde Navigation (1801 to 1881).  
 Accounts of the Tyne Improvement Commission (1861 to 1884).  
 The River Tyne: its History and Resources. By James Guthrie.  
 M'Culloch's Dictionary of Commerce and Commercial Navigation (1837, and subsequent editions).  
 Railway Returns for the United Kingdom (1885).  
 Burdett's Official Intelligence of British, American, and Foreign Securities (1886).  
 Descriptive Statement of the Great Water Highways of the Dominion of Canada.  
 By W. J. Paterson, Secretary of the Dominion Board of Trade (1876).  
 Report by Mr. T. G. Grosvenor to Sir Edward Thornton on the Poutiloff Canal, St. Petersburg (1885).  
 Statistical Abstracts of the United Kingdom.  
 Bradshaw's Railway Manual (1885).



## THE ECONOMIC ASPECT OF SANITATION.

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SANITARY reform is essentially a working-man's question. Whatever may be the importance to the State of the doctrine "Sanitas sanitatum, omnia sanitas," and it is doubtless great, to the working man it represents all his worldly well-doing. To him health is all-important; it is his only capital, and a chief source of earthly happiness.

The value of health admits, indeed, of being expressed in a monetary statement.

By means of Life Tables, such as are used by Insurance Societies, it is possible to calculate the expectation of life at any age—that is, the probability that any individual will live for a certain term of years. This done, it is then easy to ascertain the amount of capital that will be used up in nourishment, clothing, housing, &c., and in childhood the cost of education.

At first all will be outgoing of money, but after a longer or shorter period, according to the trade or profession he will follow, a certain amount begins to flow back in the form of income. The average amount of the future earnings can thus be reckoned up and set against the outgoing for maintenance, &c.

In this way Dr. Farr found the value of a Norfolk agricultural labourer to be £246 at the age of 25. The child is by this method worth only £5 at birth, £56 at the age of 5, £117 at the age of 10, the youth £192 at the age of 15, the young man £234 at the age of 20, the man of 25 £246, as I have said, and £241 at the age of 30. Then the value goes on declining to £138 at the age of 55, and only £1 at the age of 70. The cost of maintenance afterwards exceeds the earnings, and the value becomes less than nothing; and at 80 this cost is greater than the earnings by £41.

Dr. Farr remarks that these values may be compared with the former cost of slaves in Rome, in the United States, and in the West Indies.

It would be an endless task to make these calculations for all the different occupations carried on in this country. It would be necessary to construct a sort of balance sheet for every trade and profession. The time and expense involved in training and education would vary very greatly, and the subsequent gains would vary in proportion. Dr. Farr has, however, attempted to perform the work for two classes of the population, and the results are given in two tables on page 183.

In reading these tables it will be noted that the future earnings at any particular age partly depend upon the expectation of life, and it is least in infancy on account of the high death-rate under five years of age.

By using these figures it is possible to state approximately the saving of money that may be obtained simply by the saving of life. Doubtless, we have to take into account the possibility of obtaining employment for the persons thus saved from death—and objectors may be found, who will point to the number of unemployed and half-starving inhabitants of our crowded cities—and they might even say that these poor wretches should envy the fate of those who died prematurely. But this

*(Continued on page 184.)*



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## MONEY VALUE OF A MAN; OR VALUE OF THE FUTURE EARNINGS AND OF THE COST OF MAINTENANCE OF A LABOURER. INTEREST 5 PER CENT.

| Age.     | PRESENT VALUE OF |                                | Excess of Earnings<br>over Cost of<br>Maintenance. |
|----------|------------------|--------------------------------|----------------------------------------------------|
|          | Future Earnings. | Cost of Future<br>Maintenance. |                                                    |
|          | £                | £                              | £                                                  |
| 0 .....  | 147·89           | 142·52                         | 5·37                                               |
| 5 .....  | 260·32           | 204·38                         | 55·94                                              |
| 10 ..... | 347·88           | 231·01                         | 116·88                                             |
| 15 ..... | 438·85           | 247·30                         | 191·55                                             |
| 20 ..... | 482·06           | 248·47                         | 233·59                                             |
| 25 ..... | 487·90           | 241·55                         | 246·35                                             |
| 30 ..... | 474·85           | 233·19                         | 241·16                                             |
| 35 ..... | 451·73           | 223·51                         | 228·22                                             |
| 40 ..... | 423·71           | 211·69                         | 212·02                                             |
| 45 ..... | 391·11           | 198·35                         | 192·76                                             |
| 50 ..... | 350·64           | 182·27                         | 168·37                                             |
| 55 ..... | 301·41           | 163·59                         | 137·82                                             |
| 60 ..... | 238·29           | 141·08                         | 97·22                                              |
| 65 ..... | 165·20           | 119·20                         | 46·00                                              |
| 70 ..... | 97·09            | 96·32                          | ·77                                                |
| 75 ..... | 49·11            | 73·66                          | 24·55                                              |
| 80 ..... | 10·25            | 51·27                          | 41·01                                              |

## VALUE OF THE FUTURE WAGES OF AGRICULTURAL LABOURERS AND OF PROFESSIONAL INCOMES. INTEREST 3 PER CENT.

| Age.    | VALUE OF FUTURE WAGES AND SALARIES |               |                                                      |
|---------|------------------------------------|---------------|------------------------------------------------------|
|         | Of Agricultural Labourers.         |               | Of Persons in<br>Professions on Moderate<br>Incomes. |
|         | On High Wages.                     | On Low Wages. |                                                      |
|         | £                                  | £             | £                                                    |
| 11 .... | 542                                | —             | —                                                    |
| 15 .... | 607                                | 456           | —                                                    |
| 20 .... | 637                                | 487           | —                                                    |
| 25 .... | 627                                | 481           | 5,329                                                |
| 30 .... | 597                                | 459           | 5,700                                                |
| 35 .... | 556                                | 424           | 5,951                                                |
| 40 .... | 509                                | 373           | 6,038                                                |
| 45 .... | 456                                | 312           | 5,932                                                |
| 50 .... | 397                                | 253           | 5,584                                                |
| 55 .... | 330                                | 201           | 4,933                                                |
| 60 .... | 255                                | 157           | 3,979                                                |
| 65 .... | 172                                | 116           | 2,718                                                |
| 70 .... | 100                                | 72            | 600                                                  |
| 75 .... | 49                                 | 32            | —                                                    |
| 80 .... | 8                                  | 5             | —                                                    |

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is not the language of statesmen, nor yet of any thoughtful man. The English workman is still the finest specimen of his kind; and in these days, either for the Fatherland or for our Colonies, we need every hand that we can get to add to the commonwealth of our race.

As Lord Derby has said in impressive language:—

“It concerns us if the work of England be that of colonisation and dominion abroad; if wild hordes and savage races are to be brought by our agency under the influence of civilised man; if we are to maintain peace, to extend commerce, to hold our own among many rivals, alike by arts and arms; it concerns us, I say, that strong hands shall be forthcoming to wield either sword or spade; that vigorous constitutions be not wanted to endure the vicissitudes of climate and the labours of a settler in a new country. I believe that whatever exceptions may be found in individual instances, when you come to deal with men in the mass, physical and moral decay necessarily go together, and it would be small satisfaction to know that we had, through a series of ages, successfully resisted every external agency, if we learnt too late that the vigour and energy for which ours stands confessedly pre-eminent among the races of the world, were being undermined by a secret but irresistible agency, the offspring of our neglect, against which science and humanity had warned us in vain.”

We may take it as certain that on the average the value of each Englishman to the nation is at least not less than that of the Norfolk labourer, and we may apply it to ascertain the probable gain that would accrue from saving them alive.

In one of his most admirable writings—an introduction to Dr. Greenhow’s “Papers Relating to the Health of the People of England,” Mr. (now Sir John) Simon, Medical Officer to the Privy Council in 1858, with great caution and a careful avoidance of exaggeration, calculated that the preventable mortality in England and Wales at that time amounted to the enormous figure of 100,000 lives per annum. We might, perhaps, take this as a basis for our inquiry, but many of these preventable deaths are those of infants under one year of age; and it would be a burdensome task to note the numbers dying at each age, and to assess their prospective value. It will be simpler to take a case about which there can be no doubt, and to note, not the possible but the actual diminution that has taken place in the last twenty years in the mortality from one disease only, namely, consumption—a disease that attacks chiefly within the working ages, fifteen to fifty-five. At this time of life we may safely take £200 to represent the lowest value of the lives saved.

Now, the Registrar General’s Tables show us that from 1863 to 1883 the mortality from consumption has been reduced to the extent of 750 for each million of the population, or a total of more than 20,000 lives every year, and a saving to the nation in money value of over four millions sterling; or, taking male lives only, of one-half this amount.

We not unfrequently hear complaints from heavily-burdened ratepayers of the cost of sanitary improvements in our towns, but such a saving as this would largely recoup them for their expenditure, and would be a benefit both to the ratepayers and the working man. It should not be forgotten that this is not merely a ratepayers’



question. Working men, even though they are lodgers only, pay rates indirectly. All rent includes rates, as it is simply interest on the landlord's capital, plus the rates nominally paid by him. Any saving in the rates will therefore ultimately reach the working man, and a remunerative investment of money upon sanitary improvements would be felt by him both immediately and in the near future.

But this, after all, is only one aspect of the cost of disease to a community like ours. Premature death is doubtless an evil and a loss to the State, but to the working man sickness is a still greater evil. Death, indeed, removes the bread winner from his family, and leaves them to struggle alone for existence; but sickness, whether of himself or of them, adds an additional burden. If he is himself struck down, not only can he do nothing for his own or for their maintenance, but a serious burden is laid upon them to provide medical attendance and remedies of various kinds. I can well understand many a man wishing rather to die than to lie helpless whilst his family are starving. But, apart from the mental anguish it causes, sickness entails greater immediate loss even than death. It is possible to make some estimate of the amount lost, by taking the average duration of sickness amongst workpeople and comparing it with their average earnings. The data for this purpose are to be found in Mr. Neison's admirable "Vital Statistics," deduced from the experience of Friendly Societies in England. But it is important to point out that in taking these figures as a basis, the amount of the loss will be much understated. The members of friendly societies are, for the most part, the prudent and careful members of their class—they must be healthy when admitted into them—sickness caused by their own misconduct is not recognised, and therefore not entered in the books; and, lastly, if they become too poor or too dissipated to pay their subscriptions, they are not admitted to share in the benefits.

The late Dr. Watts, in his excellent health lecture on "The Loss of Wealth by Loss of Health," tells us that in the year 1844 the Manchester Unity of Oddfellows admitted 40,000 members, and lost 20,000 by non-subscription, and he adds that "the experience of 1877 does not differ materially in this respect from that of 1844." From Mr. Neison's tables, however, we learn that the experience of friendly societies shows an average of incapacity for work from sickness of about 2·45 weeks per annum per member, for all ages between 21 and 70 years. But, as Dr. Watts remarks, we have to include in our calculations the less-prudent men, who are not members of friendly societies, and we may therefore safely assume an average sickness rate of two-and-a-half working weeks per annum. The Royal Commission on the Housing of the Poor estimated the average loss of time from sickness at twenty days per annum, and this probably represents more nearly the actual state of the case.

Dr. Watts says:—"It looks a small matter that a man should miss a few days' work occasionally because he is not quite well; but when we learn that in the Manchester Unity of Oddfellows alone there was paid for sickness in 1878 the sum of £347,213, or 13s. 4d. per member, and that this large society, whose ramifications extend all over the civilised world, only represents about 10 per cent of the heads of families in England and Wales, and only about 2 per cent of the whole population, it is no longer to be called an insignificant affair. The heads of families in England



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and Wales number about 5,111,111, of whom 4,259,259 are working-class families, whose weekly wages will amount to about £5,322,675, or £887,112 per working day. Now, the heads of families do not comprise all the workers therein, but they are sufficient for my purpose. . . . We shall find from these figures that by loss of work through sickness the working men lose no less than £13,306,687 per annum; and if we add 25 per cent to that sum for the losses of employers and dealers by lessened trade, we shall find a loss to society the measure of which is £16,633,359, or £1,108,890 for each day of sickness"—that is, taking fifteen days as the average loss of work per workman per annum. If the estimate of the Royal Commissioners of twenty days were taken, the loss would be correspondingly greater.

Another example will serve to point the moral, and to bring it home to every candid mind—"The heads of families in Manchester and Salford are about 111,111, the working-class families being 92,593, whose weekly wages amount to about £115,741; so that the average sickness of  $2\frac{1}{2}$  weeks (this average is for the whole country, and is therefore much exceeded by large towns) will cost £289,352, or £19,290 for each day of sickness. For every day that this sickness can be prevented by public sanitary measures, the authorities of Manchester and Salford will add to the wages of working men £19,290, and with 25 per cent added, for profits of employers and dealers, the gain to society will be £24,112 for every day so saved from sickness. And if the sickness of the workers be lessened by public improvements in and about their homes, and by the isolation of cases of infectious diseases, the health of the non-workers will also be improved, and will thereby save money if it does not earn it; and this prevention of sickness amongst the wives and little ones will allow the breadwinner more frequently to rest in peace after his day's toil, and to leave home in the morning with a light heart and a smiling face, and to work on through the day without anxiety about the condition of affairs on his return."

Edwin Chadwick, in a presidential address to Public Sanitary Inspectors (annual meeting), says:—"In one suburban district I was at pains to get out the cost to the people of preventable disease. It was upwards of £40,000 per annum."

We may judge from the figures I have given how large an annual saving, both of money and life and mental and bodily suffering, may be obtained simply by the adoption of healthy conditions of life. As business men, it now behoves us to inquire—(1) into the causes of excessive mortality; and (2) the cost of obviating or removing them.

But, before entering into this branch of our subject, I would point out that even if it were discovered that the expenditure for the purpose of saving life is likely to be greater than the net saving in money value, it would still be worth our while to incur it.

If we can spend upwards of thirty millions for our military and naval services, and all the cost of prisons, reformatories, and police, simply for the insurance of our property against the attacks of foreign and domestic enemies, we ought surely to be ready to defend our own lives and those of our families from the insidious foes that are of our own households; and if the cost were greater by some millions than the money saving, we should still be the gainers in the end. But in all probability the mere money balance will prove to be largely in favour of the sanitary measures required; but this we shall inquire into presently.

Let us now see upon what points the fiercest attacks upon the public health are made. In other words, in what directions does the greatest loss of life take place. For the sake of brevity, I will divide the sources of excessive mortality into three great groups.

1. *Infant Mortality*.—Undoubtedly the greatest waste of life takes place amongst children under five years of age, and especially amongst infants in their first year. In the year 1883, in England and Wales, out of every 1,000 children born alive, 137 died before they reached the end of their first year of existence, and 222 before they were five years old, and this is a smaller proportion than in any previous year. In Manchester and Liverpool nearly one-half of them die in the five years following their birth. As we have seen, Dr. Farr places the minimum money value of each of these children at £5; and this estimate may perhaps be sufficiently accurate so far as its *probable* future earnings are concerned. When, however, we consider the possible achievements of each child—and this is at least the estimate taken by every mother—we may see reason for allowing a much higher assessment. How much lower in the scale of nations would England now be if Shakspeare, Milton, Sir Isaac Newton, Wellington, or Nelson had perished in the cradle! Moreover, we cannot but see the need that our country has of all her sons and daughters for the colonising and utilising her still unpeopled lands.

Even taking the lowest ground, we may say with Malthus ("Essay on Population"—Vol. III., p. 332):—"A large birth rate together with a large infantile death rate is most wasteful to a State, as a large part of its produce would be distributed without return to children who would never reach manhood."

"A young person saved from death is more likely to contribute to the creation of resources than another birth. It is a great loss of labour and food to begin over again."

"Universally it is true that under similar circumstances, that article will come the cheapest to market which is accompanied by the fewest failures."—p. 337.

A certain number of these children doubtless die of causes over which we have no control. Some have been born prematurely, and hence they are from the first too weak to struggle for life; but most of the influences of which they die are entirely preventable. Dr. Farr tells us (Supplement to the Registrar General's 35th Report—p. xxix.) that in all England out of 1,000 children born alive about 170 die of some form of zymotic disease, in which he includes diarrhœa, which kills 20 per 1,000, 22 of scrofulous disease, and 87 of diseases of internal organs, lungs, brain, stomach, &c.—more than three-quarters of the total. In Liverpool these figures are nearly doubled.

Now, most of these disorders are intensified simply by filthy surroundings, and some are almost entirely caused by them; and most of the deaths from them are allowed to take place by the ignorance and want of care on the part of the mothers. Epidemics are fed by filth, and are rendered virulent mainly by its presence; and the mortality from measles and whooping cough, which in Liverpool between them carry off 58 per 1,000, could be almost wholly prevented by care.

The diarrhœa of infants, again, when it is not due to some form of filth, is chiefly mortal from want of knowledge of the right kinds of food. Scrofulous complaints and convulsions can be traced to the same cause—want of purity,



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especially in the air these little creatures have to breathe. A very large proportion of these deaths, then, might be prevented if the poor inhabitants of our towns could have healthy dwellings, pure air and water, and proper food; if they could be taught how to manage their children when they are sick, and if suitable measures could be taken either to prevent epidemics from spreading, or to render them less fatal when they do arise. For these purposes a national system of early notification of sickness is required, and efficient means of isolation, especially in hospitals.

The next great mass of mortality occurs between the ages of fifteen and thirty-five, and is due mainly to *diseases of the lungs*, including consumption. Nearly one-half the deaths at these ages were due to these causes when Dr. Farr's life tables were constructed, and there is probably little difference at the present time. Every year more than 50,000 persons die, at all ages, of consumption in England and Wales, and nearly 100,000 of other diseases of the lungs. There is an enormous loss to the community in this heavy death toll. Most of the people thus carried off, and especially those seized by consumption, are in the prime of life, in the midst of their usefulness as working people. They are the breadwinners and the house-mothers, the toilers in the workshop and in the mart, and many of them are also the most active and intelligent members of the race. Their illnesses are also, for the most part, of a lingering character, and the care of them is a heavy tax upon their sympathising relatives. What are the chief causes of these diseases? and to what extent are they preventable? In great measure they are the result of the conditions under which these people live, and are especially due to the air they breathe either in their homes or in the pursuit of their several occupations.

In the year 1858 Dr. Headlam Greenhow presented to the Privy Council a report "on the different prevalence of certain diseases in different districts of England and Wales;" and in this report he pointed out the influence of occupation as a cause of pulmonary disease. In 1860 and 1861 he issued a still more complete resumé of this subject in the reports of the Medical Officer to the Privy Council, and he summarises the results as to the conditions favouring these diseases in the following terms:—(a) Conditions which directly excite pulmonary disease. (b) Conditions which may be at least regarded as indirect causes of these diseases. (a) 1. The conditions which have been found directly to excite pulmonary disease are inhaling an atmosphere impregnated with dust, consisting of fine particles of metal or sand-stone, of the material used in making moulds for casting metals, of the powder of mother-of-pearl shells, or of oxide of zinc, of coal or stone dust, of soot, and of dust and flue from wool or cotton. These are exemplified in the cases of the edge-tool, sword, and gun-barrel grinders of Birmingham; in the brass and iron founders of Birmingham and Wolverhampton; in the turners and enamellers of hollow hardware; in the button-makers of Birmingham; in the coal and ironstone miners of Wolverhampton, Merthyr Tydvil, and Abergavenny; and in the card-room and other cotton operatives of Lancashire, and the hosiery operatives of Nottingham. 2. Inhaling an atmosphere containing carbonic acid or other gases unfit for respiration; or the fumes arising from the combustion of gunpowder or metal, as in the cases of the miners of Wolverhampton, Merthyr Tydvil, and Abergavenny; and the brass casters of Birmingham. (b) 1. Working in ill-ventilated or over-



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heated factory rooms or workshops, as in the case of some of the silk mills of Coventry; in the domestic weaving shops, and in the watchmakers' factories and the workshops of the same city; in the button-makers' and various other workshops of Birmingham; in the factory rooms of Blackburn and Nottingham; and in many of the domestic shops and warehouses of the last-named district. 2. Exposure to vicissitudes of temperature, as in the cases of the miners of Merthyr Tydvil and the factory operatives of Blackburn. 3. Working continuously during many hours daily at a sedentary occupation, as exemplified in the cases of the women and girls employed in the lace and hosiery finishing and winding rooms of Nottingham. 4. Maintaining a stooping or otherwise constraining posture while at work, as exemplified in the watchmakers of Coventry.

These conclusions were arrived at by Dr. Greenhow nearly thirty years ago, but they have been fully confirmed by more recent experience, and may be accepted as perfectly correct. In the light of modern research, moreover, it is not difficult to see how the several conditions that have been mentioned operate, not only in the production of ordinary lung diseases, but also of consumption. In every case there is injury to the delicate textures of the lungs. In the case of dust, by their mechanical irritation, which not only affects the mucous or lining membrane, but which in the end causes inflammation of the lungs themselves; and in the case of vapours, the violent coughing that they produce causes abrasions and dilatations of the delicate air vesicles, and spasms of the air tubes; and hence impediments to the free passage of air are set up. Stooping and constrained positions during work also interfere with the natural play of the lungs, and cause them to lose their power of expelling foreign substances. In most cases, too, these conditions are accompanied by the inhalation of air rendered foul by the exhalations from the bodies, and especially from the lungs, of the workpeople themselves. The breathing of this air is the chief cause of the frequent colds from which these people suffer; and the vicissitudes of temperature mentioned by Dr. Greenhow only assist in producing this result. Exposure to cold and hardships alone will not usually cause cold to be taken. People who work at out-door employments are, on the contrary, peculiarly free from these affections.

It is not difficult, then, to see why the industrial centres of our country are so much more liable to diseases of the respiratory organs than the more open and breezy country districts. Consumption, again, follows in the same track, and the reason is not now-a-days far to seek. Taken alone, none of the above-mentioned conditions would cause consumption, but they greatly facilitate its entrance into the system. Consumption is now known to be a parasitic disease.

Thanks to Prof. Koch, we know that it is constantly associated with the presence of a micro-organism which, either by its own initiative power, or by means of the products of its activity, causes the formation of the bodies called tubercles within the textures of the body; that this creature makes its entrance from without, and that, once lodged within the frame, it travels infectively through it, chiefly along the course of the lymphatic system.

The conditions of its existence are briefly those to be found within the animal body—a certain degree of moisture, a temperature of about 37 degrees (from 86 to 107 degrees F.), and a supply of nitrogenous food, such as blood serum will give.

If cultivated outside the body all these conditions must be imitated; and there is further the very important observation that it needs for its development a sojourn of at least a week, and sometimes much longer, in these conditions before it can take root, so to speak, and grow. Moreover, it is a being of very tenacious vitality, and it will preserve its virulence and capacity for development for six weeks or longer in decomposing tuberculous material, and for six months at least in a dry state. It also resists the action of many germicides.

Its close connection with tubercle has been proved (1) by its almost constant presence in tuberculous cases; (2) by its absence in all other diseases; and (3) by pure cultivations of its colonies being injected into the bodies of animals, causing tubercular disease of the parts inoculated.

Once in the body there is unfortunately hardly a structure which tubercle does not implicate, a function which primarily or secondarily in its sequences it does not invade and derange.

But the important point for us to notice now is the assistance given to the entrance of the disease germ by a previous attack of inflammation in the respiratory organs.

It is not difficult to understand why a loss of elasticity of the lung should lead to consumption. We have seen that the bacillus of tubercle needs for its development a sojourn of at least a week in contact with suitable nourishment, and at a temperature nearly approximating to that of the human body. It is also highly probable that in all towns and places where men most congregate some of these infective particles are present in the atmosphere, but they are for the most part quite harmless to healthy persons. One reason why they are thus harmless may well be the difficulty with which these particles could make their way along the air passages of the lungs of such people. They are constantly liable to be arrested on the moist surfaces of the mucous membrane; and, if they are once caught in this way, they will soon be passed out of the chest by the delicate "cilia" that line the tubes. Even if they should penetrate into the ultimate lung tissues also, they are likely to be destroyed by the fresh blasts of air that rush freely into every portion of a healthy lung.

These safeguards, however, are not present in lungs that have either been compressed by constrained postures, or that have lost their elasticity through inflammatory actions. The germs of the disease, therefore, if they can penetrate the inactive portions of such damaged lungs may both find there suitable food and warmth, and may rest long enough to develop true tubercular irritation.

In complaints such as simple catarrh and bronchitis, in which there is a copious secretion of mucus, I am inclined to think that there is less reason to fear a permanent lodgment of the bacillus. This organism is, in fact, likely to be entangled in the frothy secretion, and to be expelled along with it before it can do harm.

But even in chronic bronchitis, after a time, the expulsive machinery may become defective, the waving cilia may become less active, the muscular apparatus of the tubes may be weakened, and dilatation and plugging of the air passages may occur; thus the bacillus may find a lodgment within the lungs, and true tubercular disease



may be set up. This specific infection is again still more likely to take place if from any cause the ultimate tissues become inflamed, as in the various forms of catarrhal-pneumonia or broncho-pneumonia. The lung loses its elasticity, its tissues are more open to infection, the residual air becomes stagnant, and its impurities, including foreign germs, are liable to be imprisoned for an indefinite time. In such a sense as this, then, the causes of inflammatory diseases of the chest are also the causes of consumption.

The connection of consumption with foul air, and especially with air rendered impure by respiration, or with the air from a badly-drained sub-soil, is too close to permit the smallest doubt that this condition is the all-important one in the production of the disease. It is proved by the universal presence of the disease wherever human beings are crowded together, in all climates and under all circumstances whenever the ingredient of foul air is also present, and also by its absence under otherwise adverse circumstances, such as starvation, exposure, and misery of all kinds, when the air is pure.

Such connection is explained when we remember the necessity for the presence of the micro-organism—the bacillus that is the specific irritant to the tissues in which tubercle is formed; and for some reason or other it seems certain that it can only produce its baleful effects when the air is also charged with organic impurity. It is not directly infectious from person to person, only when the air is impure, or when hereditary predisposition or some previous injury to the lungs enables it to exert its virulent power. The prevention of consumption, then, depends chiefly upon this one remedy—pure air; and in order that it may be pure enough for breathing, an extent of ventilation is necessary such as has hardly been dreamed of even by many sanitary reformers. The air breathed must be kept free from contamination from the soil by good drainage, and by concrete basements. It must be admitted by night and day in large quantities into the living-rooms of the population, and into their various assemblies, meeting-rooms, churches, &c. It must be allowed to circulate freely in the streets in which they live, and there must be no close courts or narrow *culs de sac* or blind alleys for them to live in. Industrial settlements for working people must be founded on suitable soils in suitable localities, and the injurious irritating dusts arising from their occupations must be banished from the workshops. By the adoption of measures such as these, this terrible scourge may be either banished, or at least greatly mitigated in its ravages. I have been thus particular in demonstrating the cause of consumption, in order that the greatness of the task in reconstructing our cities of labour may be fully appreciated.

We may now turn to the last great group of causes of preventable mortality in middle age and advanced life.

3. Of the deaths that occur after the age of 35, a very large proportion are either altogether preventable, or at least they might be postponed to a later date. Physiologists are now pretty well agreed to consider 100 years as the natural duration of human life, but at the present time, out of a million born only 223 survive to this age, and only about 38,000 reach the age of 85. Out of the million born, even in the so-called healthy districts, 12,000 die of fever after the age of 35; and in Liverpool, out of the same number, 40,000 are killed by this wholly preventable



disease. Of the remainder many die prematurely from some disease or other of the internal organs. As Dr. Farr says, "the centres of life are the sources of death."

In England and Wales about 100,000 persons die of these diseases every year—between the ages of 35 and 65; and although we cannot call these diseases strictly preventable, they have in many cases attacked their victims thus early owing to some imprudence earlier in life. Hitherto most of the diseases that have carried off such vast numbers of the population (in Liverpool, out of 1,000,000 born, only 360,000 survive the age of 35) are caused by directly-acting noxious agents, most of them by some one or other of the many microscopic organisms that thrive in some form of filth; but now we have to deal with the foes not only of a man's household, but foes to whom he has himself opened the door by his own evil habits of life.

Much of the premature age-ing of the tissues that cause heart and brain disease at this early period in his life, is due to overwork and mental strain—to the anxiety caused by the battle of life in a business community; still more is due to imprudence and intemperance in eating and drinking; and I have elsewhere calculated ("Some Causes of Preventable Disease"—Health Lecture) that at the least 40,000 or 50,000 lives are lost every year by over-indulgence in alcoholic liquors. The only mode of staving off these premature deaths is to live a healthful life, genuinely moderate and temperate; not to haste to be rich, but to rest and be thankful with what steady labour is sure to produce; to avoid working "overtime;" to take care that air and water are abundant and pure, and that all refuse matter is cleansed away as soon as formed, whether in the body, in clothing, or in the home. By such hygienic means as these much premature death will be prevented.

It will already have become apparent, however, that the measures to be taken to secure healthy lives and to reduce the heavy toll levied by death upon our communities cannot be limited to those belonging simply to personal hygiene. In addition to the precautions that must be taken by every one for himself, and the care that he must exercise in his household, there are a large number that can only be carried out by the State and by Local Authorities. These measures fall, therefore, into two categories, under the heads of (1) Personal or Domestic Hygiene, and (2) State Sanitary Administration or Preventive Medicine.

In estimating, however, the cost of a life insurance such as we have been considering—the life insurance of a nation rather than of individuals—the measures comprised in the first of these categories may be left out of the question. Most hygienic rules lean towards the side of moderation, temperance in eating and drinking, to regular and simple modes of life; they would lead rather to the saving of money than to its increased expenditure. The only addition to outlay that need be dreaded would be in the direction of increased house rent, and, perhaps, extra travelling expenses. The greater expense incurred for these things would probably be more than recouped by the saving accomplished by the avoidance of unwholesome pleasures, and especially by the lessened indulgence in alcoholic drinks.

The chief money burden of making a healthy life possible in our crowded towns rests upon the State and upon the Local Sanitary Authorities. It would not, perhaps, be very difficult to ascertain both how much is now spent by these bodies

for sanitary purposes, and how much more would be needed to make their administration practically perfect. But it is hardly necessary for our purpose to draw up a rigorous balance sheet of this nature. A little consideration will show that the outlay would fall very far within the limits of saving that would be effected by the saving of life and health by the adoption of an efficient sanitary service.

In the first place it is not likely that much further legislation would be required. We have recently been told by a Royal Commission that the laws relating to the housing of the poor are almost everything that could be desired. Doubtless a more perfect sanitary organisation and more energetic action on the part of local authorities are greatly needed, but in all probability these requirements could be obtained without much additional expense. Thus the present sanitary department of the State certainly needs a responsible head—a Health Minister, who should be answerable to Parliament for the efficient working of his department. The medical advisers of the office should have more influence than they at present possess, and the system of inspection of districts should be more thoroughly carried out. It ought to be possible to insist upon local authorities doing their duty. But this would cost the State very little more than it pays at present.

The chief cost of sanitary reform lies with the local sanitary authorities throughout the country. These need to be thoroughly reorganised, that by means of larger areas of administration they might become more enlightened and fearless in doing their duty. It would be a happy augury for the future of sanitary reform if working men would exert themselves to get representatives elected on to local boards to look after their paramount interests in the matter of health. The medical officers of health should be of higher standing, the holders of State medicine qualifications, and irremovable, except for inefficiency or misconduct. These men also might favour undertakings for the improvement of the public health, and hence for a time an increased expenditure for these purposes might be anticipated. But at the most, to how much would it all amount? Let us take only one example out of many, and try to find out the cost of sanitary work and sanitary improvement compared with the saving that actually arises from it.

From Mr. Henry Whiley's paper on the "Manchester Corporation Health Department," published in the Transactions of the Statistical Society of that city, for 1885-86, we find that the entire cost of the Health Department, including all the outlay upon hospitals, disinfection, scavenging, &c., was under £87,000 in the year ending March 31, 1885. The actual saving of life was 2,301 lives, about 1,000 of them between the ages 20 and 70, or a gain of £200,000 at the rate of £200 per person. Add to this the saving for funeral expenses of about £15,000 and the gain of £50,000 that would have been spent on the treatment of 103,000 citizens preserved from sickness, and another £50,000 for the wages they must have earned, and then, at a very moderate computation, we have a gain of more than £300,000, or a total saving of £220,000 in a single year.

Let us suppose that a loan of a million more would be needed for the entire reconstruction of the unhealthy parts of the town, for the widening of streets, the abolition of courts and alleys, for the building of healthy dwellings, or for the remodelling of the back-to-back houses and other unwholesome tenements, there



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would still be a large balance to the good, without reckoning future savings, from the saving of life and health. There is little reason, then, to fear that sanitary reform throughout the country would not more than repay its cost.

I have now endeavoured to display the economical aspect of sanitation, but it must not be forgotten that it has higher aims than the mere saving of money. As Dr. Farr says (Supplement to the Registrar General's Thirty-fifth Report)—“The hygienic problem is how to free the English people from hereditary disease, hereditary consumption, cancer, syphilis, gout, hereditary insanity, hereditary vagrancy, hereditary criminality, and to develop in the mass the athletic, intellectual, æsthetic, moral, and religious qualities which have already distinguished some of the breed. There is a Divine Image in the future to which the nation must aspire. The first step towards it is to improve the health of the present generation; and improvement, if as persistently pursued as it is in the cultivation of inferior species, will be felt by their children and their children's children. A slight development for the better in each generation implies progress in a geometrical progression, which yields results in an indefinite time that, if suddenly manifested, would appear miraculous.”

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MELBOURNE AND ITS DISTRICT.

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“Rosebery Park,

“Middle Brighton,

“Melbourne, August 4th, 1887.

“*The Co-operative Wholesale Society Limited.*

“GENTLEMEN,

“At last I have completed and now send you my contribution for the ‘Annual,’ on Melbourne and its District. Putting it off one year necessitated a complete revision of the figures. In some cases where it appeared that a comparison of the two years would be of value to the reader I have given both, but in others where it was of less value I only correct those previously in type.

“I had to wait until some Parliamentary Returns were issued before I could complete it to the latest date, and, even as it is, others will be issued before you have finally gone to press.

“During the past year or two great changes have taken place in Melbourne, some seriously affecting the trading classes, others the finance and banking, and others the working class and their relations to other classes, and I feel a strong inclination to tone down some portions of my remarks where I have spoken somewhat favourably of Melbourne.

“Wages here are high, working hours short, and the working class are all-powerful, and, at the same time, interest on capital is very high and profits of trade large. Every class, as well as the press, unites to fleece the public. No one appears to see



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that if everyone imposes on all others no one gains by it. Though wages are high the margin between income and expenditure is not large, and the increasing competition of all classes is rapidly lessening the margin. Before many years pass we shall certainly see wages lower, employment less permanent, raw and manufactured material cheaper, rents lower, profits and interest less, and more industry infused into all kinds of work than at present. In these days great changes occur very rapidly, and there is no guiding hand which directs them in a way to benefit the working class more than others. The product of mental or physical labour does not command a higher price because it is produced by such powers than does the same product if emanating from a machine hired by a mere capitalist, hence everything which tends to place the producing powers in the hands of the non-workers does injury to those who own nothing but their mental or physical powers—that is, who do not own the tools, implements, buildings, and land required for production. The effect of such changes as I refer to make it less likely that those who come here expecting to do well and save money will do as well in a year or two as they might perhaps do now; whilst manual and mental labour are relatively more powerful than they will be a few years hence. Besides, the cost of coming and returning home, if one desires, is so heavy that many months' income is required to cover that alone; and with later experience I cannot but repeat what I see daily all around me—that new comers are not made welcome by the native-born, the old colonials, and the working class generally. Nearly everyone appears to think that every new comer brings more power with him to lower wages and profit than he does to increase the demand for labour or goods, hence their opposition. Of course the employing and trading classes generally approve immigration, inasmuch as it gives them more choice of workpeople and greater power to offer less wage.

“I should be sorry to lead anyone to come here through picturing the place as a very comfortable one and then find they did not consider it so rosy as I led them to expect, and yet I would not hesitate to advise most tradespeople and good workpeople with plenty of money to come, because there are so many more openings for its profitable employment, combined with their own skill and knowledge of suitable trades, than there are at home. Above all things, I would advise no working-class family to come unless they have money enough to bring them comfortably, take them back if they don't like, and keep them for some months if they don't succeed in getting on to their liking. Where everybody is doing his utmost to get on (no matter how), there is less public care for or aid given to those who have recently come, or who need aid. They are not only looked on as interlopers, but the bulk of people have other things to care for, and confine their whole attention to them.

“I must leave all needful corrections of this contribution to the printers and editor, and I give both full play to do with it as they would with their own.

“With kind regards to all friends,

“Yours truly,

“WILLIAM NUTTALL.”

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BY WILLIAM NUTTALL.

WHEN I was invited to transfer myself and family from London to Melbourne I inquired from those who offered me a situation what was the value in Melbourne of a £500 Bank of England note—that is, how far would it go in feeding, clothing, and satisfying the needs and desires of a family compared to what it would do in London. The reply was that £500 in Melbourne was equal to £600 in London. Now, I suppose that when the committee of the Wholesale Society invited me to write what I thought useful on this subject, they wanted my answer to the same question after three years' actual experience in the colony; if so, I can only say that I feel the responsibility much more than I fear the person did who gave me the answer. Many persons will read this who may be influenced for or against this colony by what impressions I may make, and they will remember me accordingly. It is, therefore, no light task to undertake for old friends such as the readers of the "Annual." Before I made up my mind finally to come here I consulted several good old friends in Manchester, Newcastle, and London; and, though I was no little influenced by them, yet I have never blamed them for being a little mistaken, because my own opinions were much more sanguine than theirs, and were created by those who ought to have had more knowledge. I trust that should the reader take any action in consequence of what I say he may be as lenient to me as I feel towards my advisers.

Nearly twenty years since a very strong impression was made on my mind by my friend G. J. Holyoake in reference to the wisdom of comparing the amount and purchasing power of wages earned in foreign countries and in England. I remember that he urged Lord Clarendon to instruct the English representatives abroad to furnish the prices of food, clothing, and shelter, as well as the wages received in those countries, and thus enable English workmen to ascertain what the net balance between income and expenditure would be at home or abroad. I doubt whether this view of the subject yet receives that complete consideration it deserves from intending emigrants, and yet it is simply mischievous for anyone to furnish another with the wages receivable and not supply the relative cost at home and abroad of all important items of expenditure incurred by a family. The position which I have held here enables me to know the actual wholesale cost in England, France, Germany, Austria, and numerous other places of various important articles of food, clothing, furniture, china, and glass, ironmongery, men's and women's boots, hats, and other goods, and to compare these with their wholesale cost laid down in Melbourne. I can also compare the retail selling prices here with what I have paid at home for twenty years, and with what I know has been the selling prices of numerous retail stores in various parts of the United Kingdom. I therefore feel justified in submitting my conclusions to the reader, and I venture to say that if he is guided by



them he will err on the safe side. I am equally confident as to my statements about the relative costs for rent here and at home, while as to the amount of wages earned here I do not think I am much if any mistaken, though few agree on this point. The reader may therefore, if he will, form a reliable estimate of the advantages to be secured by removing here or remaining at home. I have not attempted to deal with the other colonies, I have felt it enough to deal with one, so that the reader might see his way clear at least on one point.

Australian topics appear to be more appreciated in England now than formerly. Perhaps the Colonial Exhibition has materially helped this growth of opinion and desire for information. Every immigrant here is utterly astounded on arrival to find such a civilised and progressive place. The streets surpass home ones; they swarm with the names of home firms, insurance companies, banks, &c., and make one feel in Liverpool, Manchester, or London. English, Scotch, Irish, and Welsh people, and names, are met with everywhere, and with the exception of a fair sprinkling of Jews and Germans, all the Colonials claim relationship with the "old country." Yet I cannot say that old colonists or native born give a very hearty welcome to "new chums." The feeling of opposition to new comers may only arise from a desire to prevent "rushes," which would be an evil, or the immigration of many useless persons, who only tax others to keep them. I rather think it is so with some, though not all. However, everything looks English.

Some strong expressions have been made by the press here against a Mr. Norton, who has visited England and appears to have given New South Wales a very bad character, and scarcely, I think, conveyed the true feelings of this colony at least in regard to the French occupation of the New Hebrides. I fear also that Mr. Norton went home with a previous determination to impress all English workmen with the idea that they were much better off at home than they would be here, and therefore that none should emigrate to these colonies. Well, as a rule, one may trust at least the co-operative and the trade union bodies at home, to see through this one-sided advice. No reader of this "Annual" will book me as caring much for the mere capitalist classes, as such, though I know the value of capital to the workers, as workers; and, therefore, though I lean entirely to the worker, I don't think any new light has been put before an English audience by Mr. Norton relating to the capitalist or commercial classes—importers or exporters, manufacturers or merchants—which has not been put thousands of times in every large city at home. Mr. Norton has, I fear, much to learn of English relationships between employers and employés, and their struggles for profits and wages. It would be far more appropriate if the trades of England, or the co-operators, sent delegates here, to point out to the Australian workmen what steps to adopt, what to avoid, and how to accumulate their strength for the future battles which will arise between the Australian employers and employés. Hitherto the workpeople in Victoria may be assumed to be masters of the situation, and I hope they will so remain, but that hope does not blind me to the facts which surround me. If the workpeople must remain masters it will not be by mere condemnation of capitalists and traders, but will be the result of acquiring capital themselves, and using it for the benefit of the workers as such, both in their trade unions, and in establishing co-operative workshops where they can influence



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cost of raw material, wages, hours of labour, prices, production, and trade generally. The tyranny of employers, exercised here, is mere child's play compared to what English workmen have experienced. Were it otherwise I should not be found saying one word in favour of any English artisan, or any farmer or farm labourer coming out here. I therefore ask the reader to believe me when I say that, speaking generally, but for the present only, labour holds up its head here, whilst capital is suppliant in the labourer's presence. I had rather seen Mr. Norton say who ought to stay at home, because they would not benefit by coming here, and, next, who should come, because they would find profitable and pleasant openings. But his advice appears to be all on one side, and will consequently do some injury, though it may do some good.

## HEALTH OF THE COLONY.

No Englishman need fear that this colony is too hot for him, and that therefore his constitution will break down under it. It is certainly a very changeable one, and therefore care is required. There are a few days in summer very disagreeable on account of the hot winds and street dust blowing, but when all the streets are paved and drained, much of this unpleasantness will vanish. With wider streets and more vacant land in front and rear of all household properties than at home, Melbourne must be more healthy than most English towns and cities.

The annual deaths per 1,000 of the population of Melbourne and its suburbs during the ten years 1871-1880 is recorded by the Government Statist at 20·39. Now, this rate is lower than that of the following eighteen English towns, and proves that it is more healthy here than at home.

## DEATH RATE IN EIGHTEEN ENGLISH TOWNS, 1870 TO 1879.

|                         |      |                     |      |
|-------------------------|------|---------------------|------|
| Manchester .....        | 29·9 | Wolverhampton ..... | 24·7 |
| Liverpool .....         | 29·1 | Sunderland .....    | 24·6 |
| Salford .....           | 27·8 | Birmingham .....    | 24·2 |
| Newcastle-on-Tyne ..... | 26·6 | Hull .....          | 24·0 |
| Leeds .....             | 26·5 | Norwich .....       | 23·8 |
| Oldham .....            | 26·5 | Bristol .....       | 23·7 |
| Sheffield .....         | 25·8 | Nottingham .....    | 23·2 |
| Bradford .....          | 25·7 | London .....        | 22·8 |
| Leicester .....         | 25·2 | Plymouth .....      | 22·3 |

## POPULATION, BIRTHPLACES, &amp;c.

It is only fifty years since the city of Melbourne was founded, and thirty since a constitution was granted to the colony of Victoria, when the population was 364,000, and yet the population of the colony is now over one million, and that of Melbourne and its suburbs 345,380. The city itself only contains 70,873 persons, and the suburbs, which extend about ten miles from the city, contain 274,507. Of the total population in Victoria 529,710 are males, and 462,159 females—in other words,

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for every 100 of the population 47 are females and 53 males, but in Melbourne there are 103·55 females for every 100 males. Victoria is by far the smallest colony on the Australian continent. It is only one-third the size of New South Wales, about one-eighth of Queensland, one-tenth of South Australia, and less than one-eleventh of Western Australia, yet its population exceeds any of these colonies. In 1881 its population was 111,000 in excess of New South Wales, nearly four times that of Queensland, three times that of South Australia, and twenty-seven times that of Western Australia, whilst it had 330,000 more than New Zealand, and seven-and-a-half times as many as Tasmania. As every Englishman, Scotchman, and Irishman is proud of his country, the readers of this "Annual" will readily admit that the colonial born have an equal right to feel proud of theirs; and as this pride influences the actions of most people, it is well that the reader should know the birthplaces of the people of Victoria, and see how they are influenced. The following figures show these facts, as estimated in 1884 and 1885:—

| Birthplace.                       | Total Population. |         |
|-----------------------------------|-------------------|---------|
|                                   | 1884.             | 1885.   |
| Victoria .....                    | 547,309           | 563,888 |
| Other Australasian Colonies ..... | 43,685            | 45,029  |
| England and Wales.....            | 161,987           | 167,038 |
| Scotland .....                    | 52,854            | 54,500  |
| Ireland .....                     | 95,045            | 97,908  |
| Other British Possessions .....   | 11,154            | 11,470  |
| Germany .....                     | 9,448             | 9,801   |
| The United States .....           | 2,582             | 2,695   |
| China .....                       | 13,092            | 13,539  |
| Other foreign countries .....     | 8,944             | 9,172   |
| Totals .....                      | 946,100           | 975,040 |
| Allegiance.                       |                   |         |
| British subjects by birth .....   | 912,034           | 939,832 |
| Foreign     "     " .....         | 34,006            | 35,208  |

These figures show that more than one-half of the entire population of Victoria is Victorian by birth, and the number is increasing rapidly. The reader must, therefore, expect that native desires will govern Victorian action on all important questions, not excluding such as the occupation of New Guinea by the Germans, and New Hebrides by the French, or others.

## OCCUPATIONS OF THE PEOPLE, 1884 AND 1885 (ESTIMATED).

THE occupations of a people are to co-operators specially interesting and useful, hence I give the following, showing the occupations of those of Victoria, brought down to the middle of 1884 and 1885:—



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|                                                                                                   | Number.<br>*1884. | Number.<br>*1885. |
|---------------------------------------------------------------------------------------------------|-------------------|-------------------|
| Ministering to government, religion, health, law, education,<br>art, science, and literature..... | 23,544            | 24,571            |
| Ministering to entertaining and clothing.....                                                     | 45,575            | 47,168            |
| Traders.....                                                                                      | 18,002            | 18,797            |
| Assisting in exchange of money or commodities .....                                               | 8,070             | 8,411             |
| Domestic servants .....                                                                           | 26,861            | 27,680            |
| Contractors, artisans, and mechanics .....                                                        | 51,994            | 54,434            |
| Miners .....                                                                                      | 39,097            | 40,897            |
| Engaged in pursuits subsidiary to mining .....                                                    | 922               | 986               |
| Engaged in pastoral pursuits and agriculture.....                                                 | 130,199           | 135,529           |
| Engaged in pursuits subsidiary to grazing and agriculture ....                                    | 4,783             | 4,981             |
| Engaged in land carriage .....                                                                    | 16,328            | 17,077            |
| Engaged in sea navigation .....                                                                   | 3,638             | 3,835             |
| Dealing in food .....                                                                             | 17,260            | 18,050            |
| Labourers.....                                                                                    | 26,393            | 27,610            |
| Engaged in miscellaneous pursuits .....                                                           | 1,137             | 1,181             |
| Of independent means .....                                                                        | 3,876             | 4,028             |
| Widows, wives, children, scholars.....                                                            | 508,777           | 527,035           |
| Public burthen.....                                                                               | 10,892            | 11,323            |
| Of no occupation (unspecified) .....                                                              | 8,752             | 1,447             |
| Total.....                                                                                        | 946,160           | 975,040           |

Between the censuses of 1871 and 1881 the number of gold miners decreased from 52,425 to 35,189, and the population on the gold fields from 270,428 to 230,944, notwithstanding an increase of 131,000 in the total population; whilst the value of mining produce fell from £4,740,679 in 1874, to £3,228,728 in 1884, and to £3,291,244 in 1885. It is clear, therefore, that the population must seek in other directions for employment, wealth, and progress. The population seems to take more kindly to the towns, to manufacturing and trading, than to the country, to pastoral pursuits and to agriculture. It is this leaning which causes the town population to be protective, because they feel at first unable to compete against other old countries in manufacturing operations, and therefore desire to exclude foreign-made goods, at least until they have acquired equal information and skill.

## MANUFACTORIES, WAGES, &amp;C.

INTENDING emigrants should remember that though wages may be high, and the treatment of workpeople good, in a small colony like this, yet the addition of a very few workpeople to any business materially affects the rate of wages and the relations between employers and employés. Employers here are few, and the relative number of workpeople they employ is small compared to our home firms. There are no Woolwich Arsenals here, and no Platt, Bros., and Co., each employing their 10,000

\* This table is constructed according to the proportions prevailing at the Census, with the estimated increase of population added. But they must only be taken as estimated. The mining department believes that there are now only about 26,500 miners, or a falling off from 1881 of 12,597, instead of an increase of 1,800, as shown in the table.



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hands; no Tyne, Mersey, or Thames firms open for applicants. I suppose Oldham alone employs more artisans and others who work for wages than the whole of Melbourne and suburbs. If an Oldham operative dislikes his situation, he may remove to the next street, town, or county; but that is not so easy here. Hence it is important that an intending emigrant should remember how many workpeople there are employed in his own trade, both in this city and the colony; and consider also what effect the addition of a very few will have on the amount of wages offering, the number of situations offering, and the number of employ  s seeking situations. It will not benefit an English workman to move here unless there is full work both for him and those who are already here. His coming may merely increase the competition amongst workmen for employment; and, as each must live, that would only reduce the rate of wages to all, and compel those who are already here to keep one more person than before, or even one more family. Therefore I deem the following table of importance, as showing the number of persons now engaged in the trades named, and as tending to prevent many workpeople emigrating to this colony under a misapprehension. Only those works are named which employ at least 100 workpeople:—

NUMBER OF ESTABLISHMENTS IN 1881, 1885, AND 1886, AND HANDS EMPLOYED  
IN EACH IN 1885 AND 1886.

|                                                                    | No. of Works. |       |       | No. of Hands Employed. |       |
|--------------------------------------------------------------------|---------------|-------|-------|------------------------|-------|
|                                                                    | 1881.         | 1885. | 1886. | 1885.                  | 1886. |
| Account-book manufactories and manu-<br>facturing stationers ..... | 7             | 7     | 7     | 722                    | 697   |
| Printing establishments .....                                      | 89            | 131   | 139   | 3,501                  | 3,629 |
| Agricultural implement makers .....                                | 54            | 54    | 55    | 1,152                  | 1,023 |
| Iron foundries and engineering works..                             | 147           | 145   | 148   | 5,312                  | 5,608 |
| Sheet iron and tin works .....                                     | 61            | 50    | 50    | 830                    | 819   |
| Coach and wagon makers .....                                       | 132           | 168   | 174   | 2,204                  | 2,395 |
| Saddle and harness makers .....                                    | 47            | 63    | 63    | 636                    | 579   |
| Lime works .....                                                   | 21            | 28    | 35    | 281                    | 341   |
| Venetian blind manufactories .....                                 | 12            | 10    | 12    | 105                    | 119   |
| Bedding, flock, and upholstery manu-<br>factories .....            | 15            | 23    | 25    | 208                    | 197   |
| Cabinet works (including billiard table<br>makers) .....           | 63            | 78    | 75    | 1,500                  | 1,264 |
| Wood carving and turnery work .....                                | 10            | 23    | 16    | 106                    | 76    |
| Chemical works .....                                               | 6             | 11    | 10    | 154                    | 150   |
| Ink, blacking, blue, washing powder,<br>&c., manufactories .....   | 12            | 9     | 7     | 174                    | 219   |
| Woollen mills .....                                                | 10            | 9     | 9     | 814                    | 780   |
| Boot manufactories .....                                           | 105           | 94    | 91    | 4,165                  | 4,100 |
| Clothing factories .....                                           | 63            | 86    | 73    | 5,317                  | 4,982 |
| Hat and cap manufactories .....                                    | 22            | 26    | 23    | 611                    | 591   |

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|                                                                     | No. of Works. |    |       |    |       |    | No. of Hands Employed. |       |
|---------------------------------------------------------------------|---------------|----|-------|----|-------|----|------------------------|-------|
|                                                                     | 1881.         |    | 1885. |    | 1886. |    | 1885.                  | 1886. |
| Umbrella and parasol manufactories ..                               | 9             | .. | 10    | .. | 8     | .. | 130                    | 120   |
| Rope, twine, mat, bag, and sack manu-<br>factories .....            | 18            | .. | 14    | .. | 14    | .. | 449                    | 293   |
| Tent and tarpaulin manufactories ....                               | 12            | .. | 18    | .. | 13    | .. | 103                    | 98    |
| Meat curing establishments .....                                    | 16            | .. | 20    | .. | 24    | .. | 376                    | 354   |
| Biscuit manufactories .....                                         | 13            | .. | 7     | .. | 7     | .. | 619                    | 599   |
| Confectionery works .....                                           | 8             | .. | 12    | .. | 12    | .. | 359                    | 327   |
| Flour mills .....                                                   | 144           | .. | 139   | .. | 134   | .. | 869                    | 824   |
| Jam, sauce, and pickle manufactories..                              | 20            | .. | 25    | .. | 26    | .. | 466                    | 530   |
| Aërated waters, ginger beer, and liqueur<br>works .....             | 114           | .. | 138   | .. | 139   | .. | 851                    | 922   |
| Breweries .....                                                     | 81            | .. | 74    | .. | 74    | .. | 955                    | 975   |
| Coffee, chicory, cocoa, mustard, and<br>spice works .....           | 12            | .. | 16    | .. | 14    | .. | 310                    | 310   |
| Sugar and treacle refiners .....                                    | 1             | .. | 2     | .. | 2     | .. | 200                    | 196   |
| Tobacco, cigars, and snuff manufactories                            | 16            | .. | 12    | .. | 12    | .. | 706                    | 698   |
| Boiling-down and tallow-rendering<br>establishments .....           | 15            | .. | 24    | .. | 20    | .. | 139                    | 116   |
| Brush manufactories .....                                           | 8             | .. | 8     | .. | 8     | .. | 155                    | 139   |
| Portmanteau and trunk manufactories                                 | 7             | .. | 12    | .. | 8     | .. | 126                    | 43    |
| Tanneries, fellmongeries, and wool-<br>washing establishments ..... | 151           | .. | 170   | .. | 152   | .. | 1,863                  | 1,800 |
| Chaff-cutting and corn-crushing works..                             | 165           | .. | 196   | .. | 201   | .. | 876                    | 870   |
| Cooperage works.....                                                | 24            | .. | 29    | .. | 26    | .. | 189                    | 182   |
| Paper manufactories .....                                           | 3             | .. | 2     | .. | 2     | .. | 180                    | 201   |
| Saw mills, moulding, joinery, &c., works                            | 174           | .. | 244   | .. | 256   | .. | 4,333                  | 4,832 |
| Gasworks .....                                                      | 19            | .. | 21    | .. | 21    | .. | 598                    | 581   |
| Brickyards and potteries .....                                      | 165           | .. | 218   | .. | 227   | .. | 1,937                  | 2,193 |
| Glass manufactories and works .....                                 | 9             | .. | 4     | .. | 4     | .. | 120                    | 117   |
| Stone quarries.....                                                 | 9             | .. | 162   | .. | 157   | .. | 1,057                  | 1,266 |
| Stone and marble sawing and polishing<br>works .....                | 43            | .. | 45    | .. | 43    | .. | 843                    | 675   |
| Goldsmiths, jewellers, and electro-<br>platers (manufacturing)..... | 28            | .. | 25    | .. | 22    | .. | 378                    | 372   |
| Brass and copper foundries .....                                    | —             | .. | 18    | .. | 18    | .. | 288                    | 468   |
| Smelting works .....                                                | 7             | .. | 5     | .. | 3     | .. | 197                    | 51    |
| Ship and boat builders .....                                        | 10            | .. | —     | .. | —     | .. | 12                     | 220   |
| Malthouses .....                                                    | 14            | .. | —     | .. | —     | .. | 15                     | 106   |
| Soap and candle works .....                                         | 38            | .. | —     | .. | —     | .. | 33                     | 412   |
| Fancy box and hatbox makers .....                                   | 5             | .. | —     | .. | —     | .. | 6                      | 105   |
| Floating and graving dock and patent<br>slip makers .....           | 6             | .. | —     | .. | —     | .. | 7                      | 166   |



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Numerous small works besides those enumerated exist in the colony, but they all employ less than one hundred workpeople, and therefore it is reasonable to conclude that there is not much opening here for additional hands in those trades. For instance, there are only two statuary works, employing five hands; one type foundry, and four philosophical instrument makers, with fourteen; two hosiery manufacturers, with seventy-two; eleven basket makers, with fifty-eight hands; three lead, pewter, and zinc works, employing nineteen; nine wire-working establishments, employing seventy-one; nine organ builders, with fifty-four; four diesinkers, engravers, &c., with forty-nine; and five blasting powder, &c., makers, with sixty-eight hands; and numerous others of about equal dimensions.

I cannot say from actual knowledge that there is any particular scarcity of workpeople in any of these trades. There are frequent disputes between employers and employed in several trades, and the general complaint of employers is that the workmen have everything their own way, which the workmen deny. They maintain that there is already more than a sufficient number of competitors in the labour market to enable them to keep up wages to their present rate. The employers often advocate State-aided immigration, which the employés oppose, and towards which the Government is unfavourable. It is only those who are actively engaged in the various trades who can say with any degree of certainty whether there is room for additional hands. The figures given above will assist the reader in deciding for himself as to the probability of his obtaining employment in the trades named, whilst the rate of wages paid, as shown elsewhere, combined with the cost of living, will enable him to judge pretty fairly whether it is worth his while to speculate on removal or whether the labour market is overstocked.

If I ventured to advise anyone to remove, it would be those who are well skilled in their trades, who are sober and industrious workmen, and who have saved a little money in addition to what will pay their passage and other expenses on the journey. I should prefer to advise those who have held responsible positions at home, and been accustomed to fight with difficulties either in or out of the workshop. General business knowledge, a desire to get on, the power of discerning an employer's position and difficulties, are most useful qualities here; and, above all, workmen who are willing to do their best in the absence of the employer or foreman will generally make progress. A few highly-skilled bootmakers, capable of turning out the neatest kinds of ladies' and gentlemen's light work, would probably find employment at good rates of wages, and would be the means of teaching others to make boots superior to those which are generally made here, and by this means increase the manufacture of boots and shoes to the benefit of the entire trade and people of the colony. I see no reason why a good bootmaker should not turn out as good work here as at home, provided he brings with him or is supplied with similar machinery to that which he now uses. We have a few such bootmakers now, and their manufactures are equal to anything made at home, though the bulk of colonial-made boots and shoes are not so finely made. I should also think that a few highly-skilled mechanics, fitters, moulders, cabinetmakers, tanners, and a few others would obtain full employment and good pay; and, though there are not many cutters in the tailoring trade in any city, yet I think a few really first-class ones

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would meet with employment at such wages as are never paid at home. The best workmen in any trade stand a good chance here of getting on. The market is overstocked with people who claim that they can do anything. They are rarely master of any trade, or even of any department of one. This class may succeed up the country, where all-round men are wanted, but certainly not in the cities. Book-keepers and clerks are as plentiful as in Manchester, London, and other large towns at home, because everyone who cannot find employment in his own trade turns to this. Many immigrants having a special trade not known here come out intending to take their chance, and soon find it a poor one. Loafers have a worse chance here than in England, because the population is small and each one is known. Outdoor workmen should remember they can work nearly every day all the year round in this climate, which adds materially to their annual income. Considering that the Government have decided to lay down some twelve hundred miles of railway, and that very extensive irrigation works are about to be undertaken, there should be plenty of employment for years to come for hands suitable for such work, while the trades which supply the material should be more active. There is no room for salesmen and saleswomen, nor are their salaries much higher than in England—except those of heads of departments, which are very high. Servant girls are said to be in demand everywhere, and to be very highly paid. Colonial girls do not take to service, but are either kept at home or prefer the various workshops for the manufacture of food or clothing. I do not think, therefore, that respectable girls make a mistake in coming here. They certainly meet with much better treatment than at home, work fewer hours, and have more holidays.

Tramways are being laid in numerous streets throughout the city, and employ a large number of workpeople. They will probably be extended to other cities. Many streets require paving and sewerage, whilst numerous bridges are in course of construction. Important work in connection with the harbour is likely to be undertaken, requiring much capital and many workpeople, whilst house and shop property continues to be in demand in every part of the city and suburbs; and whilst the population continues to increase at the rapid rate it does, property of this kind will also continue to be in demand. Besides, all new cities have to be pulled down and rebuilt several times over. The same thing is going on here daily in every part of Melbourne and suburbs; and therefore all employes connected with building trades should find remunerative employment for a long time yet.

I have no special knowledge of facts relating to farming, but all I hear or read points in the direction that farming or market-gardening, either on a large or a small scale, pays well. *Land is cheap, and can be obtained from the Government on easy terms.* Numerous persons with little or no capital have made their way on the land, but they would have done much better had they possessed even a small capital. It would frequently have enabled them to buy implements and machinery on better terms, or to hold or sell their produce better. Climate and soil both favour the farmer, although the reverse sometimes occurs, when heavy losses arise. Farmers are as a rule much respected, and considered well-to-do. I am sure there are thousands of agricultural labourers and small farmers scarcely earning a living at home who, if they and their families were located here, would make good fortunes



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in a few years. I would have much more confidence in advising English and Scotch farm labourers to come here than artisans. The following figures show the rates of earnings of many sections of this community, and though some of these may not be true of a few districts, I think they may be substantially relied upon in the bulk. There is a very wide margin between the lowest and the highest rate of wages in some classes, but to reduce this margin and make it more definite would require considerable space; besides, each class interested will be well able to understand why such difference arises:—

| WAGES:               |                     | Variations in |                |
|----------------------|---------------------|---------------|----------------|
| AGRICULTURAL LABOUR. |                     | 1884.         | 1885.          |
| Farm labourers ..... | per week, and found | 15s. to 20s.  |                |
| Ploughmen .....      | „ „                 | 20s. to 25s.  |                |
| Reapers* .....       | per acre, „         | 10s. to 15s.  |                |
| Mowers* .....        | „ „                 | 4s. to 6s.    | 3s. 6d. to 6s. |
| Threshers* .....     | per bushel, „       | 5d. to 7d.    |                |

## PASTORAL LABOUR.

|                                    |                         |              |            |
|------------------------------------|-------------------------|--------------|------------|
| Shepherds .....                    | per annum, with rations | £36 to £52   |            |
| Stockkeepers .....                 | „ and found             | £50 to £75   | £55 to £75 |
| Hutkeepers .....                   | „ with rations          | £26 to £40   |            |
| Generally useful men on stations.. | per week, and found     | 15s. to 20s. |            |
| Sheepwashers .....                 | „ „                     | 15s. to 25s. |            |
| Shearers .....                     | per 100 sheep sheared   | 12s. to 15s. |            |

## ARTISAN LABOUR.

|                   |                         |              |  |
|-------------------|-------------------------|--------------|--|
| Masons .....      | per day, without board, | 10s. to 12s. |  |
| Plasterers .....  | „ „                     | 10s. to 12s. |  |
| Bricklayers ..... | „ „                     | 10s. to 12s. |  |
| Carpenters .....  | „ „                     | 10s. to 12s. |  |
| Blacksmiths ..... | „ „                     | 10s. to 14s. |  |

## SERVANTS—FEMALES.

|                        |                                    |            |            |
|------------------------|------------------------------------|------------|------------|
| Cooks .....            | per annum, with board and lodging, | £40 to £75 |            |
| Laundresses .....      | „ „                                | £35 to £52 |            |
| General servants ..    | „ „                                | £25 to £40 | £26 to £40 |
| Housemaids .....       |                                    | £25 to £40 |            |
| Nursemaids .....       |                                    | £20 to £40 |            |
| Girls (per week) ..... |                                    |            | 5s. to 8s. |

\* Of late years the greater portion of the reaping, mowing, and threshing has been done by machinery. The average rates paid for machine labour in the last two years are as follows:—

|                                                 |           |
|-------------------------------------------------|-----------|
| Reaping, with binding .....                     | 9s. 2d.   |
| „ without binding .....                         | 4s. 8d.   |
| Mowing .....                                    | 4s. 6d.   |
| Threshing per 100 bushels, with winnowing ..... | 23s. 7d.  |
| „ „ without „ .....                             | 17s. 10d. |

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| WAGES :                                                              |              | Variations in |
|----------------------------------------------------------------------|--------------|---------------|
|                                                                      | 1884.        | 1885.         |
| SERVANTS—MALES AND MARRIED COUPLES.                                  |              |               |
| Married couples with-                                                |              |               |
| out family .... per annum, with board and lodging, £60 to £90        |              |               |
| Married couples with                                                 |              |               |
| family .....                                                         | £40 to £50   |               |
| Men cooks, on farms                                                  |              |               |
| and stations ..                                                      | £50 to £60   |               |
| Grooms, coachmen, &c. per week, with board and lodging, 20s. to 30s. |              |               |
| Gardeners .....                                                      | 20s. to 30s. |               |

## MISCELLANEOUS LABOUR.

|                        |                                                   |
|------------------------|---------------------------------------------------|
| General labourers..... | per day, without board, 6s. 6d. to 7s. 6d.        |
| Stonebreakers ....     | per cubic yard, without board, 1s. 6d. to 3s. 6d. |
| Seamen .....           | per month, and found, £4. 10s. to £6              |
| Miners.....            | per week, without board, £2 to £2. 10s.           |

## RATES OF MINING LABOUR.

|                              |                                      |                  |
|------------------------------|--------------------------------------|------------------|
| General manager .....        | per week, without rations, £2 to £11 | £2. 10s. to £12  |
| Legal manager .....          | 10s. to £5                           |                  |
| Mining manager .....         | £2. 5s. to £8                        | £2. 5s. to £7    |
| Engineer .....               | £2. 10s. to £6. 10s.                 | £2 to £5         |
| Engine driver .....          | £2 to £3. 10s.                       |                  |
| Pitman .....                 | £2 to £4                             |                  |
| Blacksmith .....             | 30s. to £3. 12s.                     | £1. 15s. to £3   |
| Carpenter.....               | £2. 5s. to £3. 12s.                  | £2. 2s. to £4    |
| Foreman of shift .....       | £2 to £3. 10s.                       | £2 to £3         |
| Miner.....                   | 36s. to £2. 11s.                     | £2 to £2. 10s.   |
| Surface-man (labourer) ..... | 18s. to 50s.                         | 30s. to £2. 10s. |
| Boy .....                    | 15s. to £2                           | 15s. to £1. 16s. |
| Chinese.....                 | 12s. 6d. to £2                       | 12s. to £1. 16s. |

## PERSONAL AND HOUSEHOLD EXPENSES.—COST OF FOOD.

It is generally thought that food is cheaper here than in England. That is a mistake; with the exception of beef, mutton, lamb, and veal, food is quite as dear and often dearer than at home. First-class cuts of beef vary from 6d. to 9d. per lb., fore-quarters of mutton from 2s. 3d. to 3s., or 3d. to 4d. per lb.; and hind-quarters 4d. to 5d. per lb.; lamb is about 1d. per lb. dearer, and veal about the price of the best cuts of beef. Of course there are cutting shops where less prices are demanded and where various qualities are kept, and at these a good judge often buys for less than I quote; but the bulk of buyers are not good judges, and therefore they pay for the few. The best bacon is sold at 1s. retail, and ham 1s. 2d. or 1s. 3d., but the usual cheap stuff can be bought at from 6d. upwards. Pork commands 7d. to 9d. per lb. Hence



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pork, bacon, and ham equal home prices, though beef, mutton, lamb, and veal are cheaper. New-laid eggs are now 1s. 6d. per dozen, and vary from 1s. to 2s. 6d. per dozen. Poultry is dear, hens being 2s. to 3s. 6d. each; ducks and geese are about 2s. 6d. to 4s., and 3s. 6d. to 7s. respectively. Rabbits are plentiful and cheap—about 1s. to 1s. 6d. per pair; in fact they are destroyed by the millions, up country, because of the harm they do to the land. Fresh butter varies from 1s. to 2s. 6d. per lb., the average the year round being about 1s. 8d. Salt butter is rarely below 1s. per lb., and more frequently about 1s. 4d. to 1s. 6d. Milk is from 4d. to 5d. per quart delivered. Bread costs from 5½d. to 6½d. for the 4lb. loaf, and no one ever bakes their own, or brews their own beer, as is so common in the north of England. Vegetables of all kinds are quite as dear as at home, except perhaps potatoes, which are rarely as good. They are generally very diseased and wasteful, and as a rule not nice to eat. Fruit is plentiful; it may be seen, fallen on the floor under the trees, rotting away, and yet in the towns it is quite as dear as in London or Manchester. Flour is rather lower in price, and certainly much better in quality than one generally obtains at home. We have very poor choice of fish, and great imposition in price. We need more private competition or honest co-operation. Our poor qualities are dearer than the really good kinds at home. Colonial preserved fruits vary from 6d. per lb. for gooseberry and damsons to 10d. per lb. for raspberry, and preserved meat (tinned) varies from 8d. per lb. for corned mutton and 9d. corned beef to 1s. 3d. for ox tongues and 1s. 9d. for sheep's tongues. The best colonial cheese is about the price of ordinary English, but Cheddar, Cheshire, and Stilton are certainly from 50 to 100 per cent dearer than in England. Sugar, whether colonial-made or imported, is quite as dear, and I think dearer than the present English prices. Crystals are 3½d. per lb., yellow and white grocery 2½d. to 3d., Tate's cubes 4½d. per lb. or 4s. 3d. per dozen, and 38s. per cwt. Teas and coffees are about equal to English prices and qualities. It would take too much space to compare the retail or wholesale prices of all kinds of goods imported. I will merely say that as a duty is imposed on most food imported, and as freight, packages, and other charges equal about 10 or 15 per cent on the English prices, these imported goods cost the importer at least from one-third to one-half more than in England. The following table shows the amount of duty paid here during 1885 on the importation of the articles named:—

|                                 | Value.<br>£ | Duty imposed.<br>£ |
|---------------------------------|-------------|--------------------|
| Fish, preserved .....           | 80,725      | 24,348             |
| Fruit, bottled, dried, &c. .... | 208,862     | 71,063             |
| Grain and pulse .....           | 222,758     | 49,687             |
| Jams and preserves .....        | 11,021      | 2,905              |
| Maizena and Corn Flour .....    | 6,487       | 2,562              |
| Nuts .....                      | 10,512      | 2,831              |
| Sugar, raw and refined .....    | 1,198,036   | 146,111            |
|                                 | <hr/>       | <hr/>              |
|                                 | 1,738,399   | 299,489            |

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The average rate of duty paid on the first six articles was 28 per cent, and on the last 12 per cent. This extra cost necessitates the employment of more capital; and as interest on capital is nearly double home rates and retailers' profits are far higher, it must be clear that imported food costs at least 50 per cent more here than in England, whilst some colonial produce is but very slightly cheaper. But it is well to remind the reader that when people have larger incomes they spend more largely than when they have small ones; that is, people who at home had 30s. per week and saved money, but have now 60s., spend much more on clothes, boots, hats, and furniture, and consume more beef, mutton, and bacon, are more wasteful in their habits generally both in regard to clothing and food, and also in their pleasures and recreations.

Beef and mutton may cost less per pound, but the knife and fork are used more frequently, and the leavings of one day are not so welcome the next. Besides, the climate destroys much more, and therefore the family butcher's bill amounts to quite as much per week, whilst the bread and milk bills are about equal, the grocer's much more, and the tailor's, bootmaker's, hatter's, draper's, ironmonger's, china and furniture dealer's, are at least 40 to 50 per cent higher than in England.

## DRINKING AND ITS COST.

I NEVER knew a co-operative store at home, except the Civil Service and similar ones, which dealt in wines, spirits, beer, stout, &c., yet the members of our English stores consume these drinks in the hotel or public-house, and at home. After nearly four years' colonial experience, it seems strange to me that the English stores supply their members with food, clothing, and houses, but do not supply what the members drink. The members should either cease to drink the above, or the store should be the medium of saving the members the profits arising from their sale and consumption.

I know these views will not meet with approval from many English co-operators, but I am not writing to please or displease anyone. I consider an opinion worth holding is worth expressing. When, on arrival here, I was asked my opinion about selling wines and spirits at our Melbourne store, I stated that it was not the English plan, and that I should not advocate their sale; but experience has changed that opinion. We often approve or condemn what we have experienced without seeing the other side—we are then but half informed; when both sides are seen and experienced our opinions should be more valuable. I therefore urge that whilst English working-class co-operators consume intoxicating drinks, they should supply them to their members through their stores, and thus obtain the profits on their sale. I have no doubt it would be better still to leave them unconsumed.

The following comparison shows the value of drinks and stimulants imported in 1885, and the amount of duty imposed thereon, viz. :—



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|                           | Value.<br>£ | Duty.<br>£ |
|---------------------------|-------------|------------|
| Ale and Porter .....      | 218,773     | 35,347     |
| Brandy.....               | 156,397     | 138,974    |
| Gin .....                 | 22,698      | 63,074     |
| Whisky .....              | 133,807     | 235,860    |
| Rum .....                 | 17,631      | 63,072     |
| Wine .....                | 112,959     | 41,820     |
| Tea .....                 | 749,063     | 113,430    |
| Coffee .....              | 90,267      | 12,295     |
| Chocolate and Cocoa ..... | 24,500      | 4,943      |
| Hops .....                | 18,667      | 4,498      |
| Mustard .....             | 11,756      | 2,036      |
| Salt .....                | 33,648      | 7,515      |
| Vinegar .....             | 8,848       | 2,121      |
| Tobacco and Snuff.....    | 251,846     | 141,823    |
|                           | <hr/>       | <hr/>      |
|                           | £1,850,860  | £866,808   |

Now, I venture to think there is less drunkenness in Melbourne than in any English city of equal size, and yet I should think there is more money spent here on intoxicating drinks than in similar-sized towns at home. Bottled wines, spirits, ale, and stout, as well as cordials, are to be found in most households, both of the working class and others, and are consumed more constantly at dinner tables and at social parties. Yet few get drunk. The girls and boys are not sent to the public-house with the pint or quart pitcher for that quantity of beer or stout, or with the bottle under their clothes for gin, whisky, or wine. When wanted, these drinks are found in the pantry, and no one ever dreams of going to excess in drinking them. In such a community a co-operative store may, I think, wisely and properly have a wine and spirit department, as ours has, and supply what the members desire for consumption at home. The prices of English and continental wines and spirits are much higher here than at home. Duties and import expenses cause this. To cover this and higher rates of profit, rents, salaries, &c., the distributor must charge higher prices for what he sells. As most readers of this "Annual" are not buyers of bottled wines, spirits, &c., it would not interest them to give a list of prices compared with those charged at home; but it will interest nine out of ten co-operators to learn that 6d. per glass for ale, stout, and all kinds of wines (colonial and imported), as well as all kinds of spirits and cordials, is almost the universal charge throughout hotels, public-houses, and other places where they are sold. It would thus appear that publicans should make fortunes and retire more quickly here than at home, though they do pay high rents, salaries, and other charges. I cannot but emphasise the important fact that during the three-and-a-half years that I have lived in Melbourne I have not seen twenty men so drunk as to roll themselves in the gutter, which one could see any week in Manchester, Liverpool, Newcastle, and other English towns; nor have I seen half-a-dozen women walking through respectable streets, with a couple of yards of rags behind them, waving their hands and shouting in the presence of

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policemen, as one may see any week in an English seaport. I do not think this is due to the dearness of the article, for no one who has lived here any length of time appears to be aware that it is dear, or, in fact, that anything is dear, for everyone calls for his glass as freely as he would if it were half the price. His higher income appears to remove the thought that anything is dear, for everyone eats, drinks, wears, and enjoys the best of everything available, though often costing double home prices. The spending habit is well illustrated by the very common, nay, almost universal, practice which obtains at the public-house bar, viz., that of half-a-dozen friends who meet one "shouts" or pays the cost of drinks for all, though it may be six glasses at 6d. each, and, if they care to take another glass each, some other of the party will again "shout" or pay for them. Of course the example is not repeated half-a-dozen times, so that, while economy is never thought of, drunkenness does not appear to follow this costly habit. The Melbourne press sometimes writes as if there were much drunkenness here; but I think the writers must not have visited British cities for very many years, for I am sure the proportion of drunken people to the population is but a trifle here compared with what it is in the United Kingdom.

## COST OF FURNITURE, &amp;c.

ENGLISH-MADE furniture is very dear here. The duty charged on almost all imported furniture is  $27\frac{1}{2}$  per cent on home prices, whilst home carriage, freight, packing, and other expenses are equal to, and sometimes double the duty. I have known the cost, including duties, equal 80 per cent on home prices; and as no furniture dealer would consider himself safe in putting less than 33 per cent profit on the total cost laid down on his premises, it is clear that to furnish a house in Melbourne with English or continental furniture is about double the English rate. Nothing is gained by taking colonial-made furniture in preference to imported, because colonial wages are double English rates and the eight hours' system obtains. Colonial-made furniture is priced according to the price of imported; competition is not so keen as in England, and manufacturers and retailers have not yet attained perfection in the art of ruining their own and their competitors' business rather than leave it. They may yet attain this state of perfection: when they do, profits will fall and wages may suffer, or longer hours be demanded. The struggle will then be between colonial manufacturers only, and not between colonial and foreign ones. Although duty is charged on second-hand furniture as well as new, I would advise all who emigrate here to bring as much household furniture with them as they can, as well as clothing; they will find it much cheaper than purchasing here. The import value of furniture, upholstery, chandeliers, lamps, &c., in 1885 amounted to £96,323, and the exports to £48,109. The duty paid on the imports was £21,687.

## BOOTS AND SHOES: THEIR MANUFACTURE AND COST.

Boot manufacturing in Melbourne, Ballarat, Geelong, Sandhurst, and other districts is now a rather extensive business, and will in the future become more so. Where manual labour forms a large proportion of the cost of the manufactured article, and where the raw material may also in time be grown or manufactured on the spot, we may depend on it that the import of such goods will sooner or later decline, and that they will be replaced by native-made. It is fast becoming so with the import and



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manufacture of boots. When the population of Victoria was but little over half a million, the annual value of boots and shoes imported into the colony was £500,000, whereas now, with a population of a million, the imports are only about £100,000 per annum. On the other hand, Victorian-made boots have found their way into New South Wales and other colonies, and thus employment is found for thousands of additional bootmakers in Victoria. Besides, the high wages earned, viz., 50s. to 60s. per week, and the short hours worked, namely, eight per day, have led many of the best-skilled bootmakers to leave England and come here, the result being that a few of the best and neatest kinds of medium and heavy boots and shoes are now manufactured in Melbourne. I constantly see men's single and double soled boots made here quite equal to any home-made. The same may be said of youths', boys', girls', and children's, though the very finest and lightest ladies' boots are only obtained by importing from a few French and English firms.

The price of all kinds of boots and shoes, both imported and colonial-made, is much higher to the consumer than at home. To manufacture boots at Northampton, Stone, Stafford, Nantwich, Leicester, Leeds, and elsewhere, to forward them to London, and thence ship to Melbourne, costs from 10 to 15 per cent at least for conveyance alone; whilst on landing here a duty is imposed of 2s. 9d. per pair on men's, 1s. 9d. on youths', 1s. 6d. on boys'; women's are charged 1s. 7½d., girls' (11's to 2's) 1s. 4d. and (7's to 10's) 11½d. per pair; children's being 6d., goloshes 4d., slippers 9d., and women's lasting and stuff boots 1s. 1d. per pair. Now, when these duties and transit charges are added to the home cost, and to the Melbourne charges for discharging, passing through the customs, &c., and when the heavy cost of remitting money from Melbourne to England in payment of the goods is taken into account, the price per pair is increased over the home cost at least 30 per cent. Again, imported boots are bought in larger quantities than colonial, thus necessitating the use of more capital and for a longer time than colonial; hence by the time they are placed on the shelves ready for sale they have cost the colonial retailer at least one-third more than the English retail dealer. Add the retail dealer's profit, which is a much higher rate per cent than at home, whence it follows that boots bought from successful retail dealers here must cost the consumer from one-third to one-half more than they do in England. This extra cost enables the colonial workmen to stand out for and maintain the eight hours' system, and at the same time demand and obtain almost double English wages for their labour in making colonial boots. The retail dealers and workpeople here have not to compete against English workmen in England, but only against the total cost of English-made goods put upon the shelves of Melbourne retailers. The difference is so great as to fully account for the growth of the colonial manufacture and the decline in the import trade. Whilst this is going on, the colonial employer is acquiring more knowledge and better machinery, and the workman is acquiring more skill in manufacturing, and will by-and-by equal the best English and best French workmen, and thus be able, if necessity demands, to accept a lower rate of wages than now maintains, and yet earn as large a weekly total as at present. The value of boots and shoes imported in 1885 was £109,998, which paid duty of £20,241. The exports were £46,745.

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## HATS AND CAPS, SILK AND FELT, &amp;c.

THE cost of importing felt and silk hats is very heavy. The duties alone vary from 8d. each on boys' felt to 4s. each on gentlemen's silk hats, and when the home cost exceeds 14s., the duties are still higher. The rate of duty averaged about 20 per cent on the cost laid down in Melbourne, or, 22 per cent on the home cost; untrimmed straw hats are free. The transit charges for silk or hard felt hats are heavy, on account of the large space they take and the cost of the cases in which they are packed. When the retailers' large profits are added, the price charged to purchasers is at least from one-third to one-half over home rates. Gloves are also very costly, the duty alone being 22 per cent on home cost prices, or 22 per cent on cost here. The value of hats and caps imported in 1885 was £108,690, paying a duty of £18,115, the exports being £22,629; whilst gloves imported were valued at £108,436, paid £21,467 duty, and the exports amounted to £19,134.

## WOOLLEN GOODS—GENTLEMEN'S AND LADIES', &amp;c.

DURING 1886 the duty on all woollen blankets, blanketing, rugs, and rugging, together with woollen piece goods, being vestings, trouserings, coatings, and shirtings containing wool, broadcloths, whitneys, naps, and flannels, was increased to 22 per cent on their home cost—(it is customary here to add one-tenth to the English cost to cover the estimated freight, &c., and to charge the duty on the increased value, which practically raises the duty from 20 to 22 per cent). The costs of inland carriage at home, of shipping charges and other items, vary considerably according to the value of the goods—the higher their value, the lower is the rate per cent for transit charges; whilst the lower the value, the greater is the charge per cent. A piece of fine broadcloth (costing say £1 per yard at home) occupies even less space and weighs less than a similar length of cheap tweed (costing say 2s. 6d. per yard); and, therefore, though the former may not be increased in cost more than 5 per cent, the latter may be increased 10 or 15 per cent in addition to duties. Add to this at least double wages for the tailors and tailoresses, and it will be seen that a gentleman's suit of black cloth, costing about £5 or £5. 10s. at home, cannot be obtained here under £8 to £8. 10s., and so on in proportion for all kinds of men's, youths', and boys' clothing. I have known as much as £10. 10s. charged for suits which would not command more than £6 to £6. 10s. in England.

Ladies' dress goods do not bear so high a duty as gentlemen's, wool or partly wool dress goods paying  $7\frac{1}{2}$  per cent only; but against this drapers' profits are very high. Stocks here are large and turned over less frequently than at home, because the retail dealer is farther from the producer. Buying is done weekly at home, but here only at two seasons of the year, viz., winter and summer, and, therefore, losses are heavier here. Again, salaries for heads of departments are double home rates, though for ordinary salesmen are but little better. It is not considered a high salary to pay the forewoman over the dressmakers, milliners, or mantlemakers £4 to £5 per week, whilst £6 per week is considered very low for a first-class cutter in the tailoring department. Many cutters in Melbourne receive £8, and some £10 per week, and yet it is difficult to obtain skilful, sober, and industrious cutters. With



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such salaries paid, all kinds of ladies' and gentlemen's clothes are much dearer than at home. The value of wool and worsted manufactures imported into Victoria in 1885 was £1,050,799, upon which £126,617 was imposed for duty, whilst the exports were £132,926.

Nearly every attempt made here at manufacturing woollens appears to fail, notwithstanding the heavy duties which are imposed on imported woollen goods, and which give the colonial mills a great advantage. I think there are many causes for this. Coal is very costly in this colony, being treble the average Lancashire and Yorkshire rate. This alone materially interferes with the success of the woollen mills, but I fear the boilers and engines, and probably much of the machinery, are not the most modern, nor is it easy to obtain competent managers. There are only nine woollen mills in the colony, and therefore a narrow field for acquiring experience or making selections from. But there is another cause which Lancashire and Yorkshire will appreciate, viz., the first cost of buildings and machinery. Bricks, timber, and all labour cost double home rates. Boilers, shafting, engines, a corresponding sum, whilst to import the best machinery from Lancashire, paying package, home carriage, broker's charges, freights, Melbourne charges, duties, and colonial rates for fitting up, &c., causes machinery to cost nearly double home rates. The amount of interest chargeable on a colonial mill will be about three times the amount at home, so that the cost per lb. on the cloth or yarn made puts the colonial mill to a great disadvantage. Repairs are more difficult and costly, while the mill manager has less opportunities of learning all the latest methods of manufacture and finish, especially the latter, which colonial makes lack. We cannot make good material appear as neat as our English managers do Dewsbury shoddy, and therefore the buyers select the latter. Until the public are educated, a few English woollen mill managers might find profitable employment out here. Oldham has many scores of capable cotton buyers, who can and do manage workmen and machinery, and can produce yarn of any kind, and tell the exact cost of producing it. If Yorkshire sent a few similar ones with an equal knowledge of the woollen trade, who know the best modern machinery, they would, I think, find willing employers, and would probably enable the colony to make its woollen trade more successful and produce many kinds of cloth hitherto imported. Men of this kind would be welcomed here by every class, whilst many who now come bring no new ideas or experience, no special skill for the production of wealth, but only special qualification for consuming or dissipating it.

## OTHER ARTICLES OF CLOTHING, &amp;c.

With certain exceptions a duty of 22 per cent on home prices is charged on silk manufactures and hosiery, whilst cotton and linen manufactures are free; and all articles of apparel, whether wholly or partly made up, are charged 27½ per cent on home cost. Amongst these I may mention aprons, breeches, coats, capes, cloaks, costumes, collars, cuffs, sleeves and sets, crinolines, camisoles, dresses, furs made up, frocks, fronts, infants' hoods and hats, jackets, knickerbocker suits or portions of suits, mantles, muslin and net scarves, nightdresses, pants, pellisses, petticoats, pinafores, ruffles, robes, skirts of all kinds, stays, shawls, trousers, tunics, vests,

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wristbands, men's, women's, and children's underclothing, ties, scarves, neckerchiefs, and all articles used for the like purposes. When transit charges are added, as well as interest on the cost from the date of order to the date the goods are on the retailers' shelves ready for sale, an increase of at least 40 per cent on home prices has been incurred, whilst the higher profits realised by retail dealers here will raise this rate to 50 per cent over home prices. The value of silk goods imported in 1885 was £266,335, and paid a duty of £52,900, whilst the exports were £31,360; and the value of slops, &c., imported was £359,514, paying a duty of £78,444, the exports being £318,760.

## HOUSE RENT.

THE cost of house rent in any country forms a large proportion of the expenditure of a family, but its proportion in Melbourne is nearly threefold that of the northern towns of England. It is even double what I paid in London and Rouen, and nearly three times my payments in Birkenhead and Chester. The reasons for this are that carpenters, bricksetters, plasterers, masons, and labourers receive much higher wages for fewer hours' work, that imported timber is more costly, that good bricks are nearly three times as expensive as at home, viz., £3 per 1,000 in the suburbs, and £2 in the city, and, therefore, the amount of capital permanently invested in a house is considerably more than at home. Besides, capital commands a much higher rate of interest, and whether the owner employs his own or borrows from a bank or building society, he values it at not less than from 7 to 9 per cent per annum, as against the English rate of about 4 or 5 per cent; and, lastly, the profits of builders and property owners are much larger than at home. Of course rents vary considerably, being higher in or near the city than in the suburbs, as they are in England. Perhaps my own experience may be as reliable a guide as any facts which I could give from other sources. During the first six months I resided here I paid £84 per annum for a seven-roomed house on the ground floor, with a small garden in front and behind, the house and garden covering exactly a quarter of an acre. This was within three miles of Melbourne Town Hall, and in what is considered a very respectable locality. The rooms were pretty large, averaging 14ft. by 12ft. each. I have often seen larger English homes which did not command £25 per year. Nearly three years ago I bought the house in which I live. This house is well worth £850, interest on which at building societies' or current bank rate, say 9 per cent, would be £76. 10s. per annum, or £1. 9s. 6d. per week. This house and the one first named are as nearly as possible alike, both in size, number of rooms, and area of land, but one is ten miles from Melbourne Town Hall whilst the other was only about three. By going this distance I am probably saving some £14 or £15 annually in rent and obtaining owner's profits, though I am paying an equal sum extra in railway fares. That the reader may judge exactly what space the house occupies, and, therefore, compare the rental with that of similar properties at home, I may mention that I have two front rooms each 16ft. by 15ft., two others behind 15ft. by 14ft., two of 10ft. by 10ft., and one 12ft. by 10ft., besides a bathroom 8ft. by 7ft., two pantries, and a large washhouse, with a nice garden in front 66ft. by 24ft., and a large garden and fowl-yard about 80ft. by 66ft. in rear. The house is



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well built of brick, but is twenty years old, though in splendid condition, with a 6ft. iron verandah across the whole of the front. It is only one storey high, the rooms being 11ft. 3in. from floor to ceiling. With the exception of the rooms being larger than is usual at home and having the garden, which brings but little in—though it takes much of my own and family's time—I have no more convenience than I have frequently had in England for £25 to £35 per annum rental. The ground upon which the house stands is valued at £5 per foot frontage, say £330, and the probable cost of building a similar house would be from £600 to £650 in addition. I have no personal experience of houses of a larger kind, but from knowledge acquired in numerous ways, I know that the comparative rentals in Melbourne and at home are in the same proportion as I have named. Comparing smaller wooden cottages with similar sizes in England, the difference is even greater. A four-roomed cottage on the ground floor—each room being 12ft. by 11ft., two in front and two behind, with front and back verandahs on scullery and bath—commands 11s. to 12s. per week in the country ten miles from Melbourne, and as much as 14s. to 16s. in town. Such a cottage costs here about £250 to build, whilst the land varies considerably in value according to its position. If in the country it may not cost more than £1 per foot frontage, whilst close to town the value of the land would equal, and often exceed, the cost of the cottage. Now, a similar cottage in Lancashire towns would not command more than 4s. or 5s. per week. The rental of such cottages here averages 11 to 12 per cent on the capital expended on the land and building, so that an English capitalist who is content with 4 or 5 per cent per annum has a fine opening for its safe investment at double this rate if he choose, whereas the English workman who transfers himself and his family from a Lancashire house at 5s. per week to a Melbourne one with the same conveniences would have to pay certainly double and very often three times his English rental. Of course, I have made no allowance for cost of repairs, which the owner has to bear, nor for depreciation in value by age, which a builder or owner has to consider in order that his capital may be replaced. The reader can do this for himself.

The rental of shop property is of course in the same proportion as house property. A grocer's, draper's, or tailor's shop, in a front street of a good suburb, covering a ground space of, say, 18ft. frontage outside measurement, and 35ft. depth, with staircase and sitting-room or kitchen behind, covering a further space of 15ft. square, and with four rooms above, would command from £2. 10s. to £3 per week rental, and apart from the land would two years ago have cost from £700 to £800, though at present their cost would not probably exceed £550 to £650. The cost of land varies from £10 per foot in some suburbs to £150 per foot frontage in others. The rental mentioned (£2. 10s. to £3 per week) would be where the land would cost below £50 per foot frontage, and beyond that price the rent would probably be such as to allow 10 or 11 per cent interest or more on the capital invested. Where buyers of property must pay bankers from 8 to 9 per cent interest or use their own capital, which is worth the same rate, they cannot do with less than 11 or 12 per cent rents, but often receive much higher ones. In the best streets in the city of Melbourne the cost of land is as high as £1,200 per foot frontage with a depth very little in excess of the shops named above—say from 100 to 150 feet.

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Of course such sites are mainly occupied by banks, insurance companies, and other financial institutions, or the very highest class of drapery or furniture dealers, musicians, tobacconists, and a few other similar businesses, whose profits are extremely large, and who are supported by the *élite* of the city. One illustration may be useful. The annual rental of our Equitable Co-operative Society cannot be taken at less than £5,000. In the first place, we pay £800 per annum for ground rent, having 66ft. frontage to two streets—back and front—with about 300ft. from front to back. The buildings and fittings are erected on rather more than half this space, and have cost in round figures £35,000. The lease is fifty years. We have four floors besides cellar, each running from front to back—a splendid-looking building, and a convenient one for a large trade. Now, if we allow 8 per cent interest on this expenditure, add the annual ground rent, and allow, as our rules provide, 2½ per cent per annum for depreciation of the buildings and 10 per cent for depreciation of shop fittings, and to this add the insurance on buildings and fittings at Melbourne rates, we get a sum total of £4,800 per annum. Our building is daily improving in value, and could readily be sold for more than it cost; and yet though capital commands from 8 to 9 per cent, our society cannot obtain either deposit capital for long terms, bank advances, or mortgages at much lower rates. In fact bank advances in Melbourne are not obtainable at present under 9 per cent.

What a fine field these facts show is open for English capitalists, who frequently invest in foreign countries of which they know less than they may know of Melbourne, and which investments, with interest, are frequently lost. I suppose the real reason why so few English capitalists invest here is because they know as little of it as I knew when at home. However, a few wise ones in London and elsewhere, are investing money by hundreds of thousands annually, and are realising nearly double the interest which could be realised at home. Of course such investments tend to reduce the rate of interest, but while the present rate lasts very many articles produced, consumed, and enjoyed in Melbourne will continue to be as dear as at present, amongst which the most important item is house and shop rent.

## GAS, RATES, AND TAXES.

I AM paying 10s. per thousand feet for gas, and the rates vary from 1s. 3d. to 1s. 9d. per £1 upon the valuation of the property, according to the public improvements which are in hand, or the amount of money which has been borrowed by the local councils. My rates are about £6 per annum, and my gas bill £12. However, we have neither income nor property tax here, but our customs duties more than counterbalance them. Although the rates in most suburbs of Melbourne are higher than the one in which I live, yet in others gas is cheaper. Probably we might average the city and vicinity at 5s. 9d. per thousand feet for gas. Suburbs about ten miles away have their own gasworks, and charge accordingly. All in the metropolitan area are charged 5s. 9d. The rates may be taken at 1s. 6d. per £1 on the value of the property.

## COAL AND FIREWOOD.

THE cost of coal delivered on the wharves at Melbourne is now about 23s. per ton, whereas delivered at my house, ten miles from town, I am charged 35s., the average suburban rate being about 3 per cent. These may be taken as fair average rates all



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the year round. There is not, of course, so large a quantity of coal consumed here for household purposes as at home—the climate being much warmer and fires only lighted occasionally. Wood is very generally used, and is preferred to coal, and probably costs somewhat less. Coal and wood cost our family an average the year round of 5s. per week; we consume more than most people, having been accustomed to fires in all our rooms, which colonials have not.

## OTHER EXPENSES.

THE carpenter, painter, plumber, and gardener all want double wages for odd jobs done about the house. The cabmen receive better pay, the theatres charge higher rates. Postage and telegraph rates are double. Admission to concerts, lectures, and all public places of amusement is more costly, and the female portion of the family consume three pairs of kid gloves in attending them for one pair in England. The parson is more costly here than the school board at home, for voluntary contributions are almost weekly, and coppers are not welcome. The reader may say that were he here he would stick to his earnings, consume no more, enjoy pleasures less, disregard what others do, and save much more than he would at home. The pressure of circumstances on all sides often destroys these firm resolves, and leaves the bank balance what it would be at home with half the income. However, those who have limited desires and strong wills often save, and may save considerably more here than is possible in England, and certainly with less hours' labour and a much more enjoyable climate all the year round, with the exception of half-a-dozen days in the heat of summer. But townsmen must not think that all the home enjoyments, and facilities for acquiring knowledge, are equally available here. There are parks, gardens, rivers, museums, libraries, theatres, and special schools, but those familiar to London must not expect their Kew, their National Gallery, their National Library, Crystal Palace, Belle Vue, Pomona, &c. The place is small, and all is soon exhausted. But the farm labourer would enjoy his country seat here quite as much as at home, for his past experience has kept his desires limited.

## EDUCATION.

PRIMARY education here is free, compulsory, and secular. In 1885 there were 1,826 State schools, and 4,050 instructors; 224,685 scholars were enrolled during that year, whilst 119,488 scholars were in average attendance, and 189,637 distinct children were estimated as scholars. Of the instructors 1,714 were males and 2,336 females. The school age in Victoria is from 6 to 15 years (one-fifth of the entire population being at school), 9·8 per cent of these being in day schools, and 2 per cent in evening schools. In the same year there were 28,292 distinct children attending day and night schools below 6 years of age, 183,251 of 6 to 15 years old, and 13,142 of 15 years and upwards. The number of boys exceeds the girls, being in the proportion of 100 to 92. All children are required to attend 60 days in each half year, unless there is a valid reason for their absence. In the same year 6,582 parents were prosecuted for not sending their children to school, and 5,933 convicted and fined £2,250, including costs.

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The subjects taught in free schools include reading, writing, arithmetic, grammar, geography, singing, drawing, drill, and sewing. Singing was taught by 27 visiting teachers and 99 members of the ordinary staff to 35,199 pupils, and drawing in 193 schools to 22,896 pupils. Extra subjects, for which pay is required, were taught in 185 schools, the payments amounting to £3,749, the subjects being such as are taught in advanced English schools. In 1885 there were 56 candidates for the State school exhibitions; and in 1886, 23 exhibitioners were attending at the university, and 33 at various approved grammar schools. The expenditure on public instruction in 1884-5 was £626,093, of which £307,787 was for teachers' salaries, and £107,128 for teachers' payments on results, whilst £81,935 was expended on erection of buildings, and in 1885-6 the expenditure was £657,635, of which £335,155 was for teachers' salaries, £120,897 payment on results, and £73,550 for erection of buildings. This expenditure is borne here almost without a growl, although it equals 12s. 6d. per head per annum for the whole population of Victoria.

State schools are classified according to average attendance of pupils, thus:—

|                             | Average Attendance<br>of Scholars. |
|-----------------------------|------------------------------------|
| First-class have over ..... | 700                                |
| Second-class .....          | 400 to 700                         |
| Third-class (Sub A) .....   | 250 to 400                         |
| „ (Sub B) .....             | 150 to 250                         |
| Fourth-class .....          | 50 to 150                          |
| Fifth-class .....           | Under 50                           |

First-class teachers receive a minimum fixed salary of £280 per annum, rising to £330; second-class, £220 to £270; third-class, £152 to £208; fourth-class, £112 to £144; and fifth-class, £80 to £104. But, in addition to the fixed salary, a sum equal to one-half the amount of such salary is obtainable by way of results. Relieving teachers are paid an amount equal to one-half the amount of the fixed salary in lieu of results. Female teachers are paid one-fifth less than male teachers. Pupil teachers are paid as follows: First-class, males £50, females £40; second-class, males £40, females £32; third-class, males £30, females £24; and fourth-class, males £20, females £16. Sewing mistresses receive £30 per annum. In 1885 there were 1,304 male head teachers and 388 females, also 184 male assistants and 581 females, besides 226 male pupil teachers and 521 females, and in addition 556 sewing mistresses.

All scholars provide their own school books and stationery, and the hours of attendance are generally from 9-30 to 12 and 1-30 to 4, except Friday, when they are 9-30 to 12 and 1 to 3, half-an-hour being afterwards devoted to Scriptural instruction for those scholars whose parents do not object to their children's attendance. Besides the above State schools there were 665 private schools, which had 1,645 instructors and 34,787 scholars in 1886.

It would appear from these facts that fair provision is made by the State for the elementary education of its youth. What the results are, judging from the standpoint of a strict English examination, I cannot say; but if I were to conclude from my own personal experience in the choice of cash boys, cash runners, and office



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youths at our store, my opinion would not be very favourable. I do not meet with the same neatness, accuracy, and quickness of writing, the depth of knowledge and quickness in arithmetic, the power to quickly calculate values and cast up columns of figures, rates and amounts of interest, percentages, areas and contents of articles, which I have found in boys of the same age at home. I fear that the very great interest which is taken in all kinds of sports, such as football, cricket, rowing, &c., materially interferes with the early education of the colonial youth, and even afterwards with his taste for commercial and other pursuits. I think there is a real weakness visible in the very slight interest which the colonial youth yet takes in politics, education, social subjects, and the growth of the colony; and yet in sport none surpass the colonial in making efforts to beat the world. I do not consider these good signs for the future. They may be much modified by circumstances. We shall doubtless find competition keener as years pass, and both profits and wages lower, which will test the young ones, who may, though I fear they will not at first, exhibit the same metal as their fathers did both in the old country and in this. I hope I may be mistaken.

## CHARITABLE AND OTHER KINDRED INSTITUTIONS.

POOR laws and poor rates are unknown in this colony, except to those who have resided in the old country. There are, however, about thirteen charitable institutions, such as general hospitals, hospitals for the insane, industrial and reformatory schools, orphan asylums, and others of the like kind, to which the Government contributes about £200,000 annually; and two others, viz., the Immigrants' Home and the Benevolent Asylum, to which the Government contributed during 1884 £26,455, and 1885 £23,552, and which are more like the English workhouses than any of the others referred to, and by which means the poor are provided for, whilst the unemployed or surplus labouring population generally manage to obtain employment either in the cities or the country, and do not remain on hand very long. During the two last winters several hundreds were seeking work. Vigorous steps were taken by the Government and the Railway Commissioners, who were able to induce several contractors for public works to provide them with employment at long distances from the city, and to some extent their needs were provided for; still, one cannot but feel that there is a growing tendency towards that uncertain state which prevails in the old country, and necessitates poor rates, &c.

## TRADE UNIONS.

THE trade unions of this colony are much stronger, and have greater power in the municipalities and with the Government, than at home. Each trade has its separate union, whilst all the trades are federated together, having a common council, which meets weekly at the "Trades Hall." This council may be said to have the control of all important trade questions, including strikes, lockouts, and the settlement of disputes about wages. Each trade contributes *pro rata*, according to its members, to the expenses of the Trades Hall, and of the council. The Trades Hall itself is a fine, noble building, and contains some score or more of small meeting-rooms, in which the various trade members assemble; it has in

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addition one general hall for the council, the annual and other meetings, and congresses, &c. The effect of such union is that the active officers and members of each trade meet together almost nightly, and thus become better informed; are less influenced in the wrong direction, either by the press or otherwise; and can act with decision, either individually or collectively. On all sides it is admitted that this organisation is most powerful on all trade and political questions, and especially for imposing duties on imports, or at elections for Parliament or the Upper House.

Recently several members of the Trades Council have strongly urged the need of more direct representation of labour in the Legislature, and have personally stood for election, but hitherto they have not been elected. Much jealousy exists amongst the working classes on this question; and, though they do appoint executive officers to conduct their trade business, yet they do not respect or trust their own officers so far as to elect them for the Legislative Assembly. This will be well understood at home. Hitherto the press has condemned the efforts made to have special representation appointed on behalf of labour, and its influence, I have no doubt, has been the means of preventing labour candidates being chosen. The time will come when the workers will trust their own class before others, and when they will ignore the press entirely on such a subject as this, of which the workers alone are the best judges.

## BUILDING SOCIETIES IN VICTORIA.

It is not surprising that Melbourne should contain so many large and prosperous building societies of various kinds so long as rents of every class remain so high. Building societies enable both small and large capitalists to obtain a safe and very profitable investment, and numerous large and small borrowers to obtain capital with which to build their own cottages or more costly residences. I doubt whether any other city with an equal population has more capital invested in building societies, or does a larger amount of business, than Melbourne; and I am quite sure that in no city has the value of property advanced so rapidly, or the number of residences of all kinds increased so fast, as in Melbourne and its suburbs, during the past few years. Melbourne building societies pay much higher dividends to their shareholders, and charge much higher rates to borrowers, than English societies. Every phase of home building societies is adopted here. They both feed and are fed by the banks. They receive deposits varying according to the time for which the sum is deposited—say 7 per cent for twelve months, 6 per cent for six months, and 5 per cent for three months; and adopt the usual scales of repayment, varying from one to sixteen years, as adopted by societies at home. There are permanent and terminating societies of all kinds; and both are invariably found satisfactory to their shareholders, and are generally approved by the public. Many thousands of homes have been acquired through their aid by all classes, from the three-roomed cottage to the mansion; and many tradesmen owe their business success to the capital which some of these societies have advanced them in various forms.

The latest financial report on building societies issued by the Government Statist for Victoria is for 1885, and from it I find there were then 62 societies with



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22,804 investing members and 13,762 borrowers. The paid-up capital was £2,190,676; value of landed property, £354,068; and subscriptions on investing shares during the year were £388,016, whilst the advances during the year were £2,073,189, and repayments £1,323,640. Their working expenses were £50,601; bank overdraft at the end of the year, £137,881; and deposits, £2,466,256. The advances made by these institutions in 1885 amounted to £600,000 over 1884, and £983,709 over 1883.

These facts relate to the whole of the colony of Victoria. Later figures are available for Melbourne building societies alone, and the following statement shows what position those societies occupy in the metropolitan city:—In June, 1886, there were 41 building societies in Melbourne, having £2,088,731 of share capital—an increase of £254,448 over the previous year; the dividends paid to shareholders ranged from 7 to 11 per cent—only one society, and that a very small one, having failed to pay its shareholders interest on its investments. The amount deposited was £2,384,694, or an increase of £623,576 for the twelve months. The average rate of interest allowed upon this sum was from 6 to 7 per cent. From these figures we see that the total capital both of investors and depositors in the Melbourne building societies was £4,473,425, in addition to £211,051 of undivided profits. These building societies were owing Melbourne bankers £91,361, or only about £10,000 more than the year previous. Now, considering the immense business done during last year, and the temptation to make advances upon property and to borrow from bankers, it is surprising that the amount owing to bankers is so small after so speculative a year in land and building. The loans which these societies have upon mortgages amount to £4,457,650, or £829,278 in excess of the previous year. Upon this large liability there is only £26,188 outstanding as arrears of the stipulated periodical repayments, which certainly indicates a very healthy and prosperous community. The gross profits realised by these societies for the year was £319,160, and the management expenses £43,680. The total liability of the building societies, including shareholders' capital, deposits, and reserve funds, was £4,786,135, whilst their total assets were £5,000,906. With high wages ruling, and such funds as these to aid the builder of a cottage or a mansion in one city alone, it is not surprising to find that thousands of homes are being erected in the city and suburbs every year, and that its rapidly-increasing population should still demand more, whilst large profits are realised by builders and owners, and willingly paid by occupiers.

## SAVINGS AND SAVINGS BANKS.

I DOUBT whether the bulk of the population here save as much out of their large incomes as the same classes do at home with smaller incomes. I do not mean that they could not do so if they willed it; on the contrary, I am sure they could save much more if they were content with the same food, clothing, and enjoyments. I fear that the receipt of larger incomes begets a desire to spend more largely, and at the same time it destroys that fear which so many people have at home, viz., that the time may come when their incomes may even be less, and hence their desire to prepare for it by saving what they can. I hold this opinion notwithstanding the fact that many thousands own the land and cottage they live in, and that many

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thousands more own plots of land in addition, which they have bought at land sales, as an investment, or on speculation for a rise in value, and which they are paying for by quarterly instalments. Nothing is more calculated to compel people to save than these land purchases, for the quarterly instalments must be paid, or the payments already made may be forfeited, and in very many instances nothing is more profitable, or so safe, because all land in and close to the city, and even in many suburbs, is increasing in value at a most rapid rate. There are, of course, exceptions where values fall, but that is generally because the buyer is too anxious to buy, and pays at auction sales more than a fair market value; and as very many plots adjoining are bought with a similar purpose, and but few buildings erected thereon, there are few or no second purchasers to whom the first one can sell his plot or plots; hence the fall in selling value. Notwithstanding these occasional losses, there is considerable saving taking place. The following figures show the deposits, &c., in the Post-office Savings Banks and in the ordinary savings banks in 1884 and 1885 throughout the colony:—

|                                           | Post-office<br>Savings Banks. | Ordinary<br>Savings Banks. | Totals<br>combined. |
|-------------------------------------------|-------------------------------|----------------------------|---------------------|
| Number of savings banks, 1884 .....       | 230                           | 13                         | 243                 |
| Number of depositors, „ .....             | 70,722                        | 81,622                     | 152,344             |
| Total amount remaining on deposit, 1884.. | £1,149,494                    | £1,831,589                 | £2,981,083          |
| Average amount to each depositor, „ ..    | £16. 5s. 1d.                  | £22. 8s. 10d.              | £19. 11s. 4d.       |
| Number of savings banks, 1885 .....       | 255                           | 14                         | 269                 |
| Number of depositors, „ .....             | 74,846                        | 95,170                     | 170,016             |
| Total amount remaining on deposit, 1885.. | £1,261,728                    | £2,075,290                 | £3,337,018          |
| Average amount to each depositor, „ ..    | £16. 17s. 2d.                 | £21. 16s. 1d.              | £19. 12s. 7d.       |

In 1884 and 1885 Melbourne and its suburbs claimed 60 and 61½ per cent respectively of the total depositors and 61 per cent of the total deposits. In 1880 the total deposits only amounted to £1,661,409, against £2,981,083 in 1884, showing a gain of about £1. 10s. per head for the entire population in the four years, whilst in 1885 the total deposits were £3,337,018, or double the amount in 1880. 4 per cent interest is allowed on deposits.

## VICTORIAN BANKS: INTEREST, DIVIDEND, AND RESERVES.

THE remuneration which capital receives here may be seen from the following facts:—

In 1885 the average rates of discount on local bills under 65 days was 6 to 7 per cent, 65 to 95 days 6 to 7½ per cent, 95 to 125 days 7 to 8 per cent, and over 125 days the rate was 7 to 10 per cent; whilst the average bank rate for overdrafts was 10 per cent in 1874 and 1879, and 9 per cent in 1883, 1884, and 1885, and the average rate of dividend declared to bank shareholders was 11<sup>7</sup>/<sub>10</sub> per cent in 1874, 10<sup>7</sup>/<sub>10</sub> in 1879, and 12<sup>3</sup>/<sub>8</sub> in 1885. The following comparison shows how Victorian banks realise their dividends:—

|                                                                     | 1874.      | 1879.      | 1885.      |
|---------------------------------------------------------------------|------------|------------|------------|
| Their paid-up capital upon which<br>dividend was declared was ..... | £8,503,033 | £9,026,250 | £8,901,250 |
| Deposits not bearing interest .....                                 | 4,922,187  | 4,187,452  | 7,765,696  |
| And notes and bills in circulation ....                             | 1,478,379  | 1,144,717  | 1,542,777  |



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In other words, they had £6,400,566 of capital available to lend out at from 6 to 10 per cent interest in 1874, for three-fourths of which they paid no interest, and only about 3 per cent for the remaining fourth, whilst the bank rate for deposit capital for periods of 12 months was only 5 per cent. In 1879 they had £5,332,169, in 1884 £8,099,016 (the last-named amount being nearly equal to the paid-up share capital), and in 1885 £9,308,273, which exceeded the shares.

That Victorian banks are safe may, I think, be assumed from the fact that they have reserved profits amounting to £3,908,245, or about equal to one-eighth part of the total debts due to the bank. The Victorian reserves exceed those of all the other Australian banks put together by more than three quarters of a million pounds.

## FIRE INSURANCE COMPANIES.

Most insurance companies here are branches of home associations. The financial position of the colonial companies seems to be a sound one. All companies have greater power of increasing premium rates than home associations, and have in recent years exercised this power. Few companies here will insure trade stock such as groceries, drapery, tailoring, furniture, ironmongery, &c., at less than 7s. 6d. per cent. Many charge 10s. per cent, and some higher rates, whilst the rate charge on good buildings runs about 4s. per cent. A little of the Co-operative Insurance Company's power is required here.

## FACTS RELATING TO AGRICULTURE, &amp;c.

THE value of agricultural produce increased from £4,410,436 in 1874, to £6,565,527 in 1884, and to £7,118,388 in 1885, and pastoral produce from £6,375,965 in 1879, to £10,213,914 in 1883, but fell to £9,049,679 in 1885. The progress of the colony may be seen by the following comparison :—

|                                    | 1885.      | 1855.      |
|------------------------------------|------------|------------|
| Population .....Number             | 1,000,000  | 364,000    |
| Land in cultivation .....Acres     | 2,400,000  | 115,000    |
| Bushels of wheat grown .....Number | 9,200,000  | 1,150,000  |
| Sheep .....Number                  | 11,000,000 | 4,600,000  |
| Cattle .....Number                 | 1,300,000  | 530,000    |
| Horses .....Number                 | 304,000    | 30,000     |
| Public revenue .....£              | 6,290,000  | 2,728,000  |
| Imports .....£                     | 18,044,000 | 12,000,000 |
| Exports* .....£                    | 15,551,000 | 13,500,000 |

There is one evidence of progress which is patent to every one who walks through the streets or reads the daily press, namely—the immense improvement in the selling value of land, a value which could not be obtained unless equally great progress was taking place in numerous other directions. This may be illustrated by the fact that at the first Government sale of Crown land, which took place in Melbourne on the 1st June, 1837, the average price of half-acre lots was £35, whilst

\* Although the export of gold fell off from £11,000,000 in 1855 to little over £2,000,000 in 1884.

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to-day half-an-acre could not be bought in the same street, viz., Collins Street, the best street in Melbourne, and in the most valuable part of it, for less than £150,000—a rather striking fact for those who maintain that the nation never should part with its freehold, the land.

## PRICES AND VALUE OF AGRICULTURAL PRODUCE.

THE following gives 16 years' average prices (1870 to 1885) in the country districts where the articles named are grown:—

|              |                     |               |                    |
|--------------|---------------------|---------------|--------------------|
| Wheat .....  | 4s. 7d. per bushel. | Potatoes..... | 81s. 10d. per ton. |
| Oats .....   | 3s. 5d. „           | Hay.....      | 77s. 0d. „         |
| Barley ..... | 4s. 2d. „           |               |                    |

These prices are generally much lower than those obtaining in Melbourne. The average rental of agricultural land per acre is stated to be from 6s. 10d. to 16s. 6d., the extreme figures being 2s. and 40s., and the average rental of pastoral land is from 2s. 7d. to 5s. 7d., the extreme figures being 1s. and 11s. The total value of the agricultural produce of Victoria for the year ended 1st March, 1885, was estimated at £6,565,527, and in 1886 £7,118,388.

## PASTORAL PRODUCE.

IN 1883 Victoria produced 65,930,000 lbs. of wool, valued at £4,148,500, and in 1884 61,369,000 lbs., valued at £3,879,620. The following is an estimate of the gross value of pastoral produce raised on holdings of all descriptions in 1884-5 and in 1885-6:—

|                                                                                                    | 1884-5.          | 1885-6.          |
|----------------------------------------------------------------------------------------------------|------------------|------------------|
| Milk, butter, and cheese .....                                                                     | £2,797,341       | £2,838,133       |
| Cattle, produced .....                                                                             | 1,919,742        | 1,947,760        |
| Sheep, „ .....                                                                                     | 997,257          | 1,001,422        |
| Pigs, „ .....                                                                                      | 175,750          | 179,875          |
| Horses, „ .....                                                                                    | 94,032           | 121,600          |
| Wool (excess of exports over imports, including wool used<br>in the colony for manufactures) ..... | 3,829,619        | 2,960,889        |
|                                                                                                    | <hr/> £9,813,741 | <hr/> £9,049,679 |

## LIVE STOCK IN 1881, 1885, AND 1886.

THE following figures show the increase or decrease in live stock in the period named, viz.:—

|                                           | April, 1881. | March, 1885. | 1886.      | Increase<br>on 1881. | Decrease<br>on 1881. |
|-------------------------------------------|--------------|--------------|------------|----------------------|----------------------|
| Horses .....                              | 275,516      | 293,846      | 304,098    | 28,582               | —                    |
| Milch cows .....                          | 329,198      | 329,099      | 333,898    | 4,700                | —                    |
| Cattle (exclusive of milch<br>cows) ..... | 957,069      | 958,846      | 956,892    | —                    | 177                  |
| Total cattle .....                        | 1,286,267    | 1,287,945    | 1,290,790  | 4,523                | —                    |
| Sheep .....                               | 10,360,285   | 10,637,412   | 10,681,837 | 321,552              | —                    |
| Pigs .....                                | 241,936      | 234,347      | 239,837    | —                    | 2,099                |



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## FOOD AND DRINK.

PRICES in Melbourne were quoted as follows, in 1884 and 1885. In country districts, the cost of groceries, tobacco, imported wines, coal, &c., is naturally higher, and that of agricultural and grazing produce, firewood, &c., naturally lower, than in Melbourne:

| AGRICULTURAL PRODUCE.           | 1884. |    |     |    | 1885. |    |    |                 |
|---------------------------------|-------|----|-----|----|-------|----|----|-----------------|
|                                 | £     | s. | d.  |    | £     | s. | d. |                 |
| Wheat .....per bushel..         | 0     | 3  | 7½  | to | 0     | 4  | 3  | 0 3 6 to 0 4 2  |
| Barley .....                    | 0     | 3  | 6   | „  | 0     | 4  | 7  | 0 2 6 „ 0 4 10  |
| Oats .....                      | 0     | 2  | 6   | „  | 0     | 3  | 9  | 0 2 4 „ 0 3 5   |
| Maize .....                     | 0     | 4  | 4   | „  | 0     | 5  | 0  | 0 4 0 „ 0 5 2   |
| Bran .....                      | 0     | 0  | 10½ | „  | 0     | 1  | 2  | 0 0 11 „ 0 1 3  |
| Hay .....per ton..              | 3     | 10 | 0   | „  | 6     | 0  | 0  | 3 0 0 „ 7 0 0   |
| Flour, first quality.... „      | 8     | 0  | 0   | „  | 10    | 0  | 0  | 7 10 0 „ 9 10 0 |
| Bread .....per 4lb. loaf..      | 0     | 0  | 5   | „  | 0     | 0  | 6½ | 0 0 5 „ 0 0 6   |
| GRAZING PRODUCE.                |       |    |     |    |       |    |    |                 |
| Horses, draught .....each..     | 21    | 0  | 0   | „  | 46    | 0  | 0  | 20 0 0 „ 60 0 0 |
| „ saddle and harness „          | 10    | 0  | 0   | „  | 28    | 0  | 0  | 8 0 0 „ 45 0 0  |
| Cattle, fat .....               | 6     | 0  | 0   | „  | 19    | 0  | 0  | 7 0 0 „ 16 0 0  |
| „ milch cows..... „             | 5     | 0  | 0   | „  | 10    | 0  | 0  | 5 0 0 „ 12 0 0  |
| Sheep, fat .....                | 0     | 7  | 6   | „  | 1     | 2  | 6  | 0 7 6 „ 0 19 0  |
| Lambs, fat .....                | 0     | 4  | 0   | „  | 0     | 14 | 0  | 0 5 6 „ 0 13 6  |
| Beef, retail .....per lb...     | 0     | 0  | 3   | „  | 0     | 0  | 8  | 0 0 4 „ 0 0 8   |
| Mutton, retail .....            | 0     | 0  | 2   | „  | 0     | 0  | 5  | 0 0 1½ „ 0 0 5  |
| Veal, „ .....                   | 0     | 0  | 5   | „  | 0     | 0  | 8  | 0 0 5 „ 0 0 8   |
| Pork, „ .....                   | 0     | 0  | 6   | „  | 0     | 0  | 10 | 0 0 7 „ 0 0 9   |
| Lamb, „ ....per quarter..       | 0     | 2  | 0   | „  | 0     | 3  | 6  | 0 2 0 „ 0 3 6   |
| GARDEN PRODUCE.                 |       |    |     |    |       |    |    |                 |
| Potatoes, wholesale ..per ton.. | 2     | 7  | 0   | „  | 6     | 15 | 0  | 2 5 0 „ 4 5 0   |
| „ retail .....per cwt...        | 0     | 2  | 6   | „  | 0     | 7  | 0  | 0 3 0 „ 0 5 0   |
| Onions, dried .....             | 0     | 3  | 6   | „  | 0     | 18 | 0  | 0 4 0 „ 0 8 0   |
| Carrots ....per doz. bunches..  | 0     | 0  | 6   | „  | 0     | 1  | 0  | 0 0 6 „ 0 0 9   |
| Turnips .... „                  | 0     | 0  | 5   | „  | 0     | 1  | 0  | 0 0 4 „ 0 1 0   |
| Radishes.... „                  | 0     | 0  | 4   | „  | 0     | 0  | 6  | 0 0 4 „ 0 0 6   |
| Cabbages .....per doz...        | 0     | 0  | 6   | „  | 0     | 3  | 0  | 0 1 0 „ 0 6 0   |
| Cauliflowers .....              | 0     | 0  | 6   | „  | 0     | 4  | 0  | 0 2 0 „ 0 7 0   |
| Lettuces .....                  | 0     | 0  | 3   | „  | 0     | 1  | 0  | 0 1 0 „ 0 2 0   |
| Green Peas .....per lb...       | 0     | 0  | 1   | „  | 0     | 0  | 3  | 0 0 1 „ 0 0 3   |
| MISCELLANEOUS ARTICLES.         |       |    |     |    |       |    |    |                 |
| Tea .....per lb...              | 0     | 1  | 6   | „  | 0     | 2  | 6  | 0 1 6 „ 0 2 6   |
| Coffee .....                    | 0     | 1  | 3   | „  | 0     | 1  | 6  | 0 1 3 „ 0 1 6   |
| Sugar .....                     | 0     | 0  | 3   | „  | 0     | 0  | 4  | 0 0 3 „ 0 0 4   |
| Rice .....                      | 0     | 0  | 2½  | „  | 0     | 0  | 4  | 0 0 2½ „ 0 0 4  |
| Tobacco .....                   | 0     | 3  | 0   | „  | 0     | 6  | 0  | 0 3 0 „ 0 6 0   |

## MELBOURNE AND ITS DISTRICT.

FOOD AND DRINK—*Continued.*

|                                 | 1884. |    |    |    |    |    | 1885. |   |    |    |    |    |    |    |
|---------------------------------|-------|----|----|----|----|----|-------|---|----|----|----|----|----|----|
| MISCELLANEOUS ARTICLES.         | £     | s. | d. |    | £  | s. | d.    | £ | s. | d. |    | £  | s. | d. |
| Soap, colonial .....per lb...   | 0     | 0  | 2½ | to | 0  | 0  | 4     | 0 | 0  | 3  | to | 0  | 0  | 4  |
| Candles, sperm ..... „ ..       | 0     | 0  | 9  | „  | 0  | 1  | 0     | 0 | 0  | 9  | „  | 0  | 1  | 0  |
| „ tallow ..... „ ..             | 0     | 0  | 4  | „  | 0  | 0  | 6     | 0 | 0  | 4  | „  | 0  | 0  | 6  |
| Salt ..... „ ..                 | 0     | 0  | 1  | „  | .. |    |       | 0 | 0  | 1  | „  | .. |    |    |
| Coals .....per ton..            | 1     | 5  | 0  | „  | 1  | 16 | 0     | 1 | 5  | 0  | „  | 1  | 16 | 0  |
| Firewood..... „ ..              | 0     | 9  | 6  | „  | 0  | 13 | 6     | 0 | 9  | 6  | „  | 0  | 12 | 6  |
| WINES, SPIRITS, &C.             |       |    |    |    |    |    |       |   |    |    |    |    |    |    |
| Ale .....per doz...             | 0     | 8  | 0  | „  | 0  | 12 | 0     | 0 | 5  | 0  | „  | 0  | 12 | 0  |
| Porter ..... „ ..               | 0     | 8  | 0  | „  | 0  | 12 | 0     | 0 | 5  | 0  | „  | 0  | 12 | 0  |
| Brandy .....per gall...         | 1     | 2  | 6  | „  | 1  | 15 | 0     | 1 | 2  | 6  | „  | 1  | 15 | 0  |
| Rum ..... „ ..                  | 0     | 15 | 0  | „  | 0  | 18 | 0     | 0 | 15 | 0  | „  | 0  | 18 | 0  |
| Whisky ..... „ ..               | 0     | 18 | 0  | „  | 1  | 8  | 0     | 0 | 18 | 0  | „  | 1  | 8  | 0  |
| Geneva ..per case, 15 bottles.. | 3     | 0  | 0  | „  | 3  | 2  | 6     | 3 | 0  | 0  | „  | 3  | 2  | 6  |
| Port wine .....per doz...       | 1     | 13 | 0  | „  | 3  | 12 | 0     | 1 | 13 | 0  | „  | 3  | 12 | 0  |
| Sherry ..... „ ..               | 1     | 15 | 0  | „  | 3  | 15 | 0     | 1 | 15 | 0  | „  | 3  | 15 | 0  |
| Claret ..... „ ..               | 1     | 12 | 6  | „  | 3  | 10 | 0     | 1 | 12 | 6  | „  | 3  | 10 | 0  |
| Champagne ..... „ ..            | 3     | 10 | 0  | „  | 5  | 5  | 0     | 3 | 10 | 0  | „  | 5  | 5  | 0  |
| Colonial wine..... „ ..         | 0     | 12 | 0  | „  | 1  | 10 | 0     | 0 | 12 | 0  | „  | 1  | 10 | 0  |
| DAIRY PRODUCE.                  |       |    |    |    |    |    |       |   |    |    |    |    |    |    |
| Butter .....per lb...           | 0     | 0  | 8  | „  | 0  | 2  | 0     | 0 | 0  | 10 | „  | 0  | 2  | 3  |
| Cheese ..... „ ..               | 0     | 0  | 5  | „  | 0  | 1  | 0     | 0 | 0  | 5  | „  | 0  | 1  | 0  |
| Milk .....per quart..           | 0     | 0  | 4  | „  | 0  | 0  | 6     | 0 | 0  | 4  | „  | 0  | 0  | 6  |
| FARMYARD PRODUCE.               |       |    |    |    |    |    |       |   |    |    |    |    |    |    |
| Geese.....per couple..          | 0     | 6  | 0  | „  | 0  | 12 | 0     | 0 | 7  | 0  | „  | 0  | 15 | 0  |
| Ducks ..... „ ..                | 0     | 4  | 6  | „  | 0  | 8  | 0     | 0 | 5  | 0  | „  | 0  | 9  | 0  |
| Fowls..... „ ..                 | 0     | 4  | 6  | „  | 0  | 7  | 0     | 0 | 4  | 0  | „  | 0  | 8  | 0  |
| Rabbits ..... „ ..              | 0     | 0  | 9  | „  | 0  | 2  | 0     | 0 | 0  | 6  | „  | 0  | 1  | 0  |
| Pigeons ..... „ ..              | 0     | 1  | 6  | „  | 0  | 3  | 0     | 0 | 2  | 6  | „  | 0  | 3  | 6  |
| Turkeys .....each..             | 0     | 4  | 0  | „  | 0  | 12 | 6     | 0 | 7  | 0  | „  | 0  | 15 | 0  |
| Sucking Pigs ..... „ ..         | 0     | 10 | 0  | „  | 0  | 14 | 0     | 0 | 10 | 0  | „  | 0  | 14 | 0  |
| Bacon .....per lb...            | 0     | 0  | 8  | „  | 0  | 1  | 0     | 0 | 0  | 8  | „  | 0  | 1  | 0  |
| Ham ..... „ ..                  | 0     | 0  | 10 | „  | 0  | 1  | 0     | 0 | 0  | 10 | „  | 0  | 1  | 2  |
| Eggs .....per doz...            | 0     | 0  | 10 | „  | 0  | 2  | 4     | 0 | 0  | 10 | „  | 0  | 2  | 6  |

## THE SALE, PURCHASE, AND TRANSFER OF LAND.

THE sale of land in Melbourne by private treaty and public auction is as common as the sale of shares on the London Stock Exchange, and the contracts for sale as well as the actual transfer from seller to buyer, and issue of certificate of title, are as simple, and are executed and completed as easily and promptly, as are the contracts for a sale of shares, the transfer by a company, and the issue of share certificate to the purchaser. The cost of transferring is also as low as that of transferring a



## MELBOURNE AND ITS DISTRICT.

parcel of shares in numerous English companies, viz., about £1. 10s. to £3. The land sold or offered for sale is known by its certificate just as a share is known, and this certificate is produced, if required, at the sale, or along with, and at the time the transfer is presented to the Government Registrar, who may be considered as the landowners' secretary in the same sense as the secretary of a company is the shareholders' secretary. Printed contracts of sale, with suitable blanks to be filled in by the seller and purchaser, can be bought from any stationer, or actual transfers can be purchased just as share transfers are at home. The seller and buyer may agree about a sale, may step into a stationer's shop, buy and fill up a transfer, pay the deposit, or the whole purchase money, lodge the transfer and the certificate of title at the Lands Transfer Office, and in a day or two a new certificate may be obtained or the old one be endorsed, certifying that the buyer is registered as the owner just as he would be in a company for shares; and just as the "share certificate" is proof of ownership, so is the land "certificate of title" proof of ownership of the land named and shown on such title certificate by plan, &c. Nothing can be more simple, more safe, or more economical. No solicitor is required either to prepare the sale contract, or the transfer, or to lodge it or apply for the certificate of title. Anyone who can write out a transfer of shares may complete a transfer of land with equal ease and safety, and if the transfer is informal it will be pointed out at the Registry, when another can be there and then written, signed, and deposited, and the bad one destroyed. The amount of stamp duty payable is 5s. for every £50 of consideration money, or fraction thereof, after deducting the first £50. I need not compare this system of changing ownerships of land with our home practice. Every reader is familiar with the latter; and how any people so practical as the British claim to be can for a month submit to their system after they once become familiar with the system which has existed here since 1862, passes my understanding. Every landowner in Great Britain ought at least to have the option, if not even to be compelled to register his title deeds, for a very small fee. After they are found to be the right ones, then they should be retained by the nation, and a certificate of title should take their place. Land sold with a guarantee that it is registered under the Transfer of Land Statute always sells more readily, and commands better prices here, than when a certificate of title cannot be shown. In the latter case the certificate may be defective. The buyer has to expend £10 or £50 in trying to bring it under the Land Statute, and the title may be so defective as not to satisfy the Titles Office, in which case he loses considerable money for nothing, whereas the issue of a certificate of title is like the issue of certificate of registration of a society or company, which no one ever disputes, but is everywhere taken as evidence of what is stated on it. Some months ago it cost me £35 to bring a plot under the Land Statute because some old deeds were lost. In future £3. 3s. or less will complete a sale and transfer of this land. One can hardly avoid feeling ashamed of the old country for putting up with such cumbersome methods of dealing with land. We boast of our improvements in manufacture, the economies effected, the improved facilities for conveyance of goods from place to place, and the low price at which we deliver goods to foreign countries, and for which we expect to be worshipped by young colonials who favour State ownership of

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land and registration of titles and transfers. Are they not justified in thinking us a little self-conceited, and certainly very stupid, on some questions? If land was held by as large a proportion of the entire population in Great Britain as it is here, the barbarous methods of transferring land at home would doubtless soon be changed. Still, a commercial nation ought to see that the immense cost of such a system falls not upon the landowner alone, but upon the tenant, and in manufacturing operations it hampers trade. Anyhow, co-operators, who claim to be economists, whatever else they are, should at least take to politics so far as to demand that a land registry shall be established for the use of those who care to avail themselves of it.

It must not be assumed that all land in Victoria is registered as here indicated. The Act came into force in 1862. Since then all lands alienated from the Crown have come at once under its provisions, and lands alienated prior to its inauguration can be brought under them by application, provided a clear title be produced, or a title containing only a slight imperfection. In the latter case the title is given subject to such imperfection, which is noted on the deed. It may be interesting and useful just now to English readers to give the statistics of land registered under the Act in this colony. It appears to be one of those questions which are within measurable distance of becoming popular, and, therefore, the facts recorded here will be useful.

The total quantity of land under the Transfer of Land Statute at the end of 1885 was 10,224,843 acres, the declared value of which at the time it was placed under the Act was £30,829,835. The land granted and sold up to the end of 1885 was 14,425,610 acres. It therefore follows that at that period nearly three-fourths of the alienated land in the colony was subject to the provisions of this statute. Of the whole extent of land under the statute, 996,619 acres, valued at about 18½ millions sterling, were brought under by application; and the remainder, amounting to 9,655,317 acres, valued at nearly 12½ millions sterling, came under its provisions by virtue of its having been purchased from or granted by the Crown since the Act was passed. The following statement shows the business transacted in 1883, 1884, and 1885 under the statute :—

|                                                         | 1883.     | 1884.     | 1885.     |
|---------------------------------------------------------|-----------|-----------|-----------|
| Applications to bring land under the Act..Number        | 1,356     | 1,393     | 1,532     |
| Extent of land included.....Acres                       | 46,158    | 99,722    | 55,463    |
| Land brought under the statute—                         |           |           |           |
| By application.....Acres                                | 68,884    | 74,775    | 90,232    |
| ".....Value £                                           | 1,420,232 | 1,337,862 | 2,065,624 |
| By grant and purchase from the Crown ..Acres            | 472,536   | 469,482   | 427,093   |
| ".....Value £                                           | 564,504   | 585,099   | 519,422   |
| Certificates of title issued.....Number                 | 16,478    | 19,021    | 23,051    |
| Transfers, mortgages, leases, releases, surrenders, &c. |           |           |           |
| Number                                                  | 24,331    | 28,241    | 33,343    |
| Registering proprietors .....                           | 5         | 33        | 16        |
| Other transactions .....                                | 25,626    | 29,561    | 35,142    |
| Forms sold .....                                        | 414       | 319       | 597       |
| Fees received .....                                     | 37,599    | 42,129    | 49,685    |



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All the Australian colonies have adopted this system of registration and transfer. It was originated by the late Sir R. R. Torrens, and first introduced into South Australia; and, as the reader has seen, this small colony of Victoria has land under the statute equal in extent to one-third of the total area of England and Wales, whilst 34½ million acres still remain as the property of the colony, and will be brought under the Act if ever it become private property.

## PUBLIC WORKS : RAILWAYS, WATERWORKS, &amp;c.

THE railways, telegraphs, and waterworks of Victoria belong to the State. The railway system is unique. We have State ownership, but not State management in the sense that education is, or as the post-office is, both here and at home. The sole management is vested in three commissioners, who hold office for seven years, and are eligible for reappointment; but they are not removable on a change of Ministry, but may be removed by vote of both Houses. The chairman of this body, R. Speight, Esq., late assistant manager of the Midland Railway Company in England, who came out here on the 8th February, 1884, has a salary of £3,000 a year, and his two co-workers £1,500 each. Since Mr. Speight and his colleagues took control it is generally admitted that immense improvement has been made in the management, that great economies have been effected, advantages conferred on the public, and the railways made to pay. When under the direct control of Parliament the feeling was general that jobbery was very prevalent, special knowledge and skill absent, and consequently the working expenses were heavy and no profit realised. The fares charged are first and second class only, the former being 2d. per mile for country lines and 1d. for suburban, and the latter 1½d. per mile for country and ¾d. for suburban. The carriages are about equal to the average English lines, but not equal to a few of the best. The rate of travelling is much slower than at home, and there are no express trains with such speed as English and Scotch travellers are accustomed to, the reason being that our gradients are much heavier, and therefore neither equal speed nor safety obtainable. There are not so many facilities offered at specially reduced rates, or for long periods, as at home, but recently the commissioners have been enabled to commence this system, with which no one can be more familiar than is the chairman of the commissioners, for he is said to have been brought up with the Midland Company from a boy, and therefore must have had much to do with the great reforms in railway management and catering for public approval for which that company was famous. I consider that the good management of the Victorian railways will do a great deal towards converting the public to the idea that railways everywhere should belong to the State. The total length of lines open for traffic is about 1,800 miles, whilst in 1884 a further 1,000 miles were authorised, at a cost of six million eight hundred thousand pounds sterling. About £22,000,000 have already been expended on State railways in Victoria, in addition to about £2,000,000 paid out of revenue. By the time the present authorised ones are completed, it will amount to thirty millions in round figures, for there is already plenty of evidence that the actual cost will far exceed the estimated cost.

Of the total public debt of Victoria on June 30th, 1885, viz., £28,576,787, no less than £21,836,598 is invested in State railways, £3,763,939 in the State waterworks,

## MELBOURNE AND ITS DISTRICT.

£1,075,000 in State schools, and the remainder in law courts, Parliament Houses, harbours, graving docks, public offices, and defences. Of these sums £26,333,380 has been borrowed in Great Britain, and £2,243,407 in Victoria. The lenders have no reason to complain of the rate of interest paid to them, for they receive 4 per cent on  $16\frac{1}{2}$  millions,  $4\frac{1}{2}$  on 5 millions, 5 on  $2\frac{3}{4}$  millions,  $5\frac{1}{2}$  on  $1\frac{1}{4}$  million, and 6 per cent on  $4\frac{1}{2}$  million pounds, or an average of £4. 11s. per cent, amounting to £1,283,622 per annum. The municipal debt of Victoria is £1,229,203, and the Harbour Trust debt is £500,000. When English readers are told by the press that the colony is borrowing too fast and getting into debt, they should compare the above mode of applying borrowed capital with that which the English nation has adopted, and still adopts, as may be seen in the "Co-operative Annual" for 1884, at pages 278 to 313. Capital is not being borrowed by this colony to be squandered from the mouth of the breechloader—though, by the way, we hear noise enough here as to what England should do in squandering more to fight either German, French, or Russian—but it is being invested in reproductive work which pays its way, and is always to be seen by the lender. Large as the National Debt is at home, yet if the home railways and waterworks were owned by the nation, that debt would be more than doubled, and the individual indebtedness of every inhabitant of Great Britain would be about double the amount per head of this colony. It is quite true that a little disturbs a small colony like this, for we have only one million of a population; of these one-third is situated within ten miles of Melbourne Town Hall, and the remainder scattered all over the colony, and engaged mostly in agricultural and mining pursuits. The head is certainly too large and the body too small; and until there is more actual production and proportionately less of mere exchanging of produce and wealth, little things will continue to cause disturbances in commercial, banking, and other circles, and may, therefore, to some extent create some alarm in the minds of money lenders in London and elsewhere. However, the greatest of the colonial investments, viz., its railways, has now been brought to a paying point, whilst the total income for the waterworks has not only covered all expenses of management, but has also nearly paid off the entire cost of construction. These two facts do not speak very badly for a young thriving colony which determined that the State should own its railways, waterworks, telegraphs, &c., against the prejudices of all old notions, and even the money lenders in the old country.

The annual report of the Victorian Railway Commissioners, for the year ending June, 1886, has been issued since the foregoing remarks were written; and as this report contains many facts which indicate the great progress taking place in the colony, I think it would be well to place some of the more important ones before the reader. The report shows that the amount of railway indebtedness for borrowed capital on the 30th June was £22,980,153. The annual interest payable for this amount was £964,895, and the average rate  $4\frac{1}{2}$  per cent. The total expenditure upon railways open and in course of construction was £24,357,813, of which £23,637,814 was expended on railways earning revenue.

The revenue derived from working the lines during the year was £2,329,126, and the expenses amounted to £1,310,537, or  $56\frac{1}{4}$  per cent of the revenue, leaving a net



## MELBOURNE AND ITS DISTRICT.

revenue of £1,018,588, which, after paying all charges and interest on railway loans, leaves a balance of £61,483 to the credit of the consolidated revenue. If the net revenue is divided over the total expended capital it gives  $4\frac{1}{2}$  per cent; if divided over the expenditure upon lines opened it gives  $4\frac{3}{10}$  per cent. Again, if it be divided upon the total debenture capital only, the rate is 4.43; and, lastly, if divided upon the total debenture capital expended upon the lines opened, the rate per cent is 4.77. It is clear from these figures that the Victorian railways are not only paying all charges, but that they also pay interest upon all the capital invested in them, and which, as I have said above, averages  $4\frac{1}{2}$  per cent, and they are in addition handing over a handsome balance to the State. Clearly, therefore, State ownership pays, and management for the State by competent men is a success; whilst almost every month brings additional advantages to the farmer, the manufacturer, the importer and exporter, and the general public, and all this without wasting one penny of national capital in duplicate railways for the purpose of, as at home, transferring profits from one shareholding body to another.

Desirable railway reforms are obtained here by asking for them, if the commissioners see that what is asked for is an advantage to the public. It is not so, however, at home. There the question is—"Will it suit the shareholders to grant it?" Turning to the "Annual" for 1884, I find on page 454 that the average profit realised by all the railways in the United Kingdom was only  $4\frac{1}{4}$  per cent per annum on the capital. Now, considering that wages here are much higher than at home, that railway trucks which at home cost £70 cost here about £120, and that coal costs double the home rate, and many other expenses of management are proportionately higher here, great credit is due to the railway commissioners and the staff generally for the satisfactory profits realised and the progress made.

Comparing the year 1885 with the one previous, we learn that the total revenue increased 7 per cent, the number of passengers 22 per cent, the live stock carried 13 per cent, tons of goods carried 20 per cent, and the train mileage run 6 per cent, whilst the cost of working the railways fell from  $58\frac{1}{2}$  per cent on the revenue to  $56\frac{1}{4}$  per cent; or, in other words, the amount of expenses was increased by £33,112, and the amount of income by £147,194, showing a net gain of £114,081. As the commissioners say, these figures show a steady increase in all branches of traffic, and that the revenue is very satisfactory in the face of reductions in the rates, estimated at £100,000 for the year, which sum is equal to 3 per cent on the revenue. The additional length of railway opened for traffic during the year amounted to 67½ miles.

One paragraph in the commissioners' report reads very curious to those who are accustomed to the reports of private railways, and especially to the public who are not shareholders. The commissioners say that "as the labour devoted to keeping separate accounts of the various lines of railway under their control might be more profitably employed, they purpose in future, *unless otherwise asked*, to deal with the accounts as one general system only." This reads like the report of a board of directors of a working-class company at home, or the committee of a co-operative store reporting to their members, and is an immense stride in advance

on the autocratic treatment of shareholders and the public by most railway boards. When did a railway board talk of consenting to do what they were "asked" or what the public wish? Another feature equally creditable to the commissioners is where they recommend that a superannuation fund should be formed, to which the Government and the employés should contribute, so as to provide for persons prematurely broken down or who have met with accidents not resulting in death, and not being otherwise provided for. This is co-operation of the people with their own Government, and should in my opinion alter the views of our home co-operators who frequently urge that employés under Government or under large associated bodies—like the Wholesale Society—never are and never will be cared for or thought of. The railway employés here actually invite the commissioners to their annual meeting, and both sides publicly give each other credit for what is due to them or advice where needed, whilst, on the other hand, the commissioners invite and encourage the employés to practically co-operate with them so as to secure economy and efficient management of the national estate and business. What a contrast to the greed which individual self-seeking creates in private proprietors and shareholders!

The report indicates that many improvements are being made by the commissioners, and which the public appreciate, such as the issuing of return tickets at all stations, cheap and excursion trains to and from the country, interlocking, the block system, and the use of continuous brakes.

Those who preferred the railways being managed by a Cabinet Minister, who was changed at every election, strive hard to find fault with the management by commissioners, but they really cannot make headway. One pays and the other did not, and it will require much explanation to convince the public that the growth of the colony has led to the altered result. It is said there was much jobbery under the old system, but no one now even hints it. That is a great public gain. When a new line is now decided upon, the public know it, and not merely a few friends of the Minister of Railways, who could formerly have bought up the land and sold it at enormous profits. Of course, land in close proximity to a new line advances rapidly now, but the rightful owners obtain the advantage. Still, I consider a law needful limiting the price to be paid to such reasonable sum over and above what was the fair market value of the land when the railway was announced. Private persons ought not to be enabled to buy State land at £1 per acre, and in a year or two, when a railway is decided upon, to demand £500 per acre for it from the State.

Railway employés are only admitted into the service by ballot, on passing competitive examinations in the special work for which they are required. That is a sound policy, and, judging from the few complaints made, it appears to give satisfaction.

Probably some of our co-operative friends would say that the railway employés should select and elect the railway commissioners, settle the rate of wages, the number of hours worked, and the fares chargeable to the public. That would be pleasant indeed, provided those who paid the fares and the public who supplied the capital were satisfied. These advocates could show that the slight addition to the fare of each individual traveller would be so trifling as not to be worth consideration.



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Such argument as this is yet used, I see, by home co-operators, with regard to the manufacture by co-operators of goods for sale to stores. To me it seems that life is made up of a very large number of small things of this character, which, if so treated, would in the end be severely felt by the public. However, our present railway system gives much satisfaction here both to the employés and the public, whilst the Victorian railways have now attained an enviable position, and are materially aiding the progress of the colony.

## TRAMWAY SYSTEM.

OUR tramway system is better than any I have ever seen either in Great Britain or France. There are probably great improvements made in England since I left, so that some there may now be equal to ours. The cars here are drawn by an endless chain, which is laid underground the whole length of the line, and which appears to be very costly at the commencement, but very economical afterwards. The cars are constructed so as to admit passengers either inside or outside, and are very neat. The municipalities make the roadway or tramway, and lease it to the tramway company on a thirty years' lease of the streets through which the trams pass, who pay 6 per cent on the cost as rent, the company maintaining the roads. At the termination of the lease, the roads revert to the corporations, the rolling stock remaining the property of the company. The fares are partially regulated by the city authorities; the company may charge less, but cannot charge more than the maximum fixed in their lease. The streets of Melbourne are well suited for a system of this character. They are all either parallel or at right angles, and are generally wide, leaving ample room for vehicular and passenger traffic in addition to the tramways. Melbourne streets are far superior to anything I have seen elsewhere. I am not now speaking of their condition as to drainage or paving, in which respect they are far behind other cities, but of their width and length; and the absence of curves and corners is to be admired. I think no city in Great Britain will, a few years hence, have so neat an appearance as Melbourne. Collins Street contains many buildings, comprising insurance offices, banks, and general warehouses, equal to anything at home; whilst rapid improvements are daily being made, and the suburbs are very enjoyable for the same reason.

## SPORTING AND BETTING.

How fond the Colonial is of sports! There is nothing like him at home. There are fewer methods of enjoyment, recreation, and education here than at home, which doubtless lead the Colonial more to sports. Football takes the lead, and cricket follows. Frequently we see ten, twenty, and even thirty thousand persons at a football match. From the youngest to the oldest—male and female—all are alike. Sport takes much time of the working staff of any establishment during working hours. Betting is also much more common here, and has not a good influence on the youth. At home a better or bookmaker is not thought fit for a cashier, accountant, or place of trust; but few, if any, have such feeling here. I like the sports out of working hours, though not the betting. I prefer our English habits in the office and the workshop rather than the Colonial.

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## MELBOURNE PRESS.

WE have three morning and one evening daily papers in Melbourne—the *Age*, 1d., the *Argus*, 2d., and the *Telegraph* morning, 1d., and the *Herald* evening—and, of course, numerous weeklies, monthlies, quarterlies, &c.

It is difficult to describe to the English reader what Liberalism or Conservatism means here—one thing at least seems clear, viz., that to be a Liberal here one must be a Protectionist, and to be a Conservative must be a Free Trader. The *Argus* is deemed Conservative, and is generally considered to represent the interests of farmers and free-traders; the *Age* is said to be Liberal, and represents protection first, and farming interests next, but perhaps somewhat less than the *Argus*; whilst the *Telegraph* is somewhere between the other two. The last, however, appears to be more religiously inclined, and advocates the temperance cause more frequently. The working class generally take the *Age*, which has a circulation of over 60,000 daily. The commercial classes, importers, and farmers take the *Argus*, which has a circulation somewhat less than 20,000 daily. Between these two extremes the *Telegraph* finds its supporters, whilst its circulation, I am told, is much larger than that of the *Argus*, but much less than the *Age*. All these papers devote much space to sports. The *Herald*, the evening paper, does not appear to take quite so active a part in politics as the others. It finds plenty of material outside this, and has, it is understood, a very large circulation—some 50,000 or more daily.

## CONCLUSION.

I FEAR I have more than exhausted the space allotted to me, yet there are many useful and interesting subjects not touched on. I hope I have supplied such facts as will enable the thoughtful reader to judge whether this is a place better suited for him than where he now is. I have endeavoured to show what rate of wages may be earned by deserving workmen; what probability there is of such workmen securing permanent employment all the year round; and what the cost of food, clothing, furniture, rent, &c., would be for an average English artisan. These are the principal facts necessary to guide him in making his choice. It is a serious thing to cause anyone to leave home and emigrate here, at so great a cost as that of selling his furniture and transferring a family, and almost as serious to leave them in doubt whether to come or not. There are hundreds whom I know well, and whom I would not hesitate for one minute to advise, but there are many others for whom I would not take equal responsibility, hence I have felt much difficulty in striving to put the facts exactly as I see and feel them. I have no hesitation in advising the really useful class of skilled artisans, who are ready-handed, industrious, anxious to get on, sober, and have a little spare capital after landing; nor should I hesitate to speak plainly to the farming class, more especially if they had capital enough to buy a few cows, horses, pigs, poultry, and farming implements; and the larger their family the better, if able to work on the farm. The agricultural labourer, married or single, need not hesitate. To rent a farm is easy, to buy one is equally so, or to farm for others. People with money may easily make much more and yet work at their usual occupations.



## MELBOURNE AND ITS DISTRICT.

Bargains in land and property are offering, to anyone with capital and ordinary care, such as are not found at home. This colony needs brains, industry, and capital even more than the old country. Even barbers find no customers complain at paying 6d. for shaving, or 1s. for hair cutting. That is characteristic of many things here. Hundreds of illustrations could be given of people arriving with but a few pounds in their pocket, and in a very few years being able to pay the old country a visit, at a cost of £100, or even £200. People don't usually spend so much unless they have much more behind it. To begin as a farm labourer, and in eight or ten years to have accumulated £500, £1,000, or even £1,500, is not considered out of the way, and yet the family is fed, clothed, and cared for. I hardly need say cared for; the boys and girls here have a very bad habit of caring for themselves, and don't appear to be kept under control as at home. They become men and women here at a much younger age than at home; and chatter about the "old boy" or the "old woman" in their teens, so that there is no fear of the children not pushing their way. I have frequently heard fathers of families boast of the "cheek" of the Colonial youth, and make comparisons between this cheek and the timidity of English boys. My only fear is, that as Colonial youths have been accustomed to such comfortable homes and lives, and to such excessive spending, if the time should ever arrive when longer hours of labour are required, closer attention to work during those hours, more economy in production, distribution, living, and recreation, they may not be willing to comply therewith. The old Lancashire cotton spinners made fortunes when 1d. and 2d. or more per lb. profit was obtainable; but their sons and followers now make fortunes by the  $\frac{1}{4}$ d., the  $\frac{1}{8}$ d., and the  $\frac{1}{16}$ d. per lb. It may be that the young Colonial will exhibit equal qualities when the necessity arrives. But how much better it would be if he would now accumulate earnings and teach all his children to do so, take to co-operative methods of production, distribution, farming, &c., instead of allowing the few to become the owners and employers and the many mere employés. I have said nothing about the absence of a State Church in this colony. I suppose I forgot it, because I never attended one at home except at the annual Congresses, and I have never been reminded about its necessity here. It may be a blessing, but few here know it, or feel the need of it, so that question never disturbs us. Nor have I spoken about our aristocrats. I have not yet met with any, though I have met with many who seem to wish for an aristocracy. In every street, at every dinner-table, in every meeting, and at every concert, theatre, chapel, or church, the wealthiest are more easily approached than at home. We experience no difficulty in getting at the Postmaster-General, the Chief Secretary, the Prime Minister, the Head of Customs, of Education, of Lands, or any other head, and when we do meet them they are generally found to understand the details of the work in their department quite as well if not better than our home ornaments. Ours are not departmental ornaments, but useful ones. They are what the co-operative body expects all its great leaders and workers to be. This makes life much more pleasant than at home. No one worships anybody, though wealth and success are, I think, more universally sought after, and less sacrifice of time and money are made here than at home; and yet brains are worshipped fairly well, and certainly have a wider field and

## MELBOURNE AND ITS DISTRICT.

better chance of making headway. I am a little wrong here when I say that no one is worshipped, for royalty and Queen Victoria are worshipped as I never knew them to be at home. I cannot quite understand this strong feeling of Victorians for royalty, for they have no king or emperor, but govern themselves; and though they have a governor, yet there is not much toadying to him on account of his position.

The people as a whole are sound, and maintain their own self-respect. Never having admired big or little kings in the various walks of life in which I have trodden, I cannot comprehend the feeling which the Victorian exhibits towards the Queen and royalty. I could understand the good feeling being exhibited towards the Queen for the good qualities which she has often exhibited as a woman, but it appears to be more than this. I often think it is the deep-seated respect which the people have for the English nation and people, and not merely royalty; and besides this they are not aware that the English love of kings and queens is rather declining, and the love of people growing. However, it is useless for me to attempt to solve what is entirely out of my line. I worship the people as a whole, and not the figure-head. In conclusion, I have only to add that there is a great future before this colony, and especially so if the English capitalists retain confidence in it, and have the good sense to invest here when the true facts are known to them as they are known to many, and may be by others. What we need is labour of the best kind, and capital in plenty. I must not omit to say that I am indebted to the Government Statist of this colony for nearly all the figures, and also for some of the paragraphs relating to those figures, which I have given in this contribution. I was, and am, a great admirer of R. Giffen, Esq., our home statistician, notwithstanding some of the articles which have appeared in our *Co-operative News*, which I mostly approved; but I admire our Victorian statistician, H. H. Hayter, Esq., quite as much. During his term of office he has materially improved Victorian statistics, and been the means of improving all Australian; and has certainly placed at the disposal of the public most valuable records for so young a colony.

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## THE POSITION OF THE WORLD'S GRAIN TRADE.

BY GEORGE T. TURNER, EDITOR OF THE "MARK LANE EXPRESS."

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### INTRODUCTORY.

IN attempting to deal with a subject of such scope I scarcely know where to begin, and shall probably find a corresponding difficulty in respect of leaving off. If I rightly understand what is expected of me in this connection, it is to give an idea, to the best of my ability, of the position of the grain trade at the present time, as representing the world's supply and demand; and in order to do so I shall try to avoid unnecessary details, technicalities, and statistics. Figures have a very imposing effect in a paper of this kind, and I shall be obliged to use them to a much greater extent than I could wish, but I have to deal with facts, and prefer to render them with the least possible embellishment. Unfortunately, the statistics common to the grain trade are for the most part approximations; it is impossible to proceed in any inquiry within its scope without stumbling over a mere estimate almost at the very onset. Consequently, it is the easiest matter imaginable for individuals holding opposite opinions to take any set of approximations and work out from them the most divergent conclusions. I propose, therefore, to avoid estimates as far as I am able. In making statements of facts I stand to be corrected; in making deductions from them I hope to find myself in accord with the judgment of my readers. I propose to take the various sections of the subject in the order of their relative importance, and do not see the necessity for further prefatory remarks.

### THE WHEAT TRADE.

THE Imperial average price of wheat for the week ended with October 1 was 28s. 5d.; the return for the week ended with March 6, 1886, was 29s. There can be no precedent found for such quotations as these for more than a century; consequently they are virtually without precedent; inasmuch as such prices a hundred years ago would mean something very different to growers. I have no hesitation in making this statement, as one of fact which requires no argumentative demonstration. There has been a gradual fluctuating decline for years past, but we appear now to have settled down to a level of values far below what is supposed to be the actual cost of production in this country. It is generally believed that 40s. per quarter represents the lowest value at which wheat can be grown in this country at a profit, and 30s. per quarter is a price which I take to be incompatible with paying rent at all. It is true that the values of all agricultural produce have declined in about the same proportion as those of wheat, but wheat is the crop which farmers have mainly

## THE POSITION OF THE WORLD'S GRAIN TRADE.

to depend on for ready money; and, whilst it may not be absolutely necessary to grow wheat, as a cereal crop, it is evident that all our stronger and better soils will grow wheat to a greater advantage than any other cereal; therefore, if it does not pay to grow wheat it cannot pay to grow any other straw crop, as a broad rule. Not only so, but wheat is "the staff of life," and the only cereal, excepting maize, of which we import more than we grow. A statement has recently been published by the *Mark Lane Express* which shows this very plainly, and I cannot do better than reproduce it in this connection:—The home production is worked out from the acreage and estimated yield of the 1886 harvest, as rendered by the Agricultural Department, in quarters of 480lbs. for wheat, 400lbs. for barley, 312lbs. for oats, and 480lb. for beans and peas. The imports are given in Board of Trade quarters, except in the case of wheat and flour, which are reckoned as quarters of 480lbs. The comparison between home and foreign supplies may be arranged as follows, the small proportion of exports not being deducted:—

| Home Production,<br>Harvest of 1886.<br>In quarters. | Importation.<br>In quarters.<br>Cereal Year 1886-7.   | Total<br>Supply.<br>In quarters. |
|------------------------------------------------------|-------------------------------------------------------|----------------------------------|
| Wheat (480lbs.).. 7,918,486                          | Wheat and Flour (480lbs.) 18,121,210                  | 26,039,696                       |
| Barley (400lbs.).. 9,788,701                         | Barley (Board of Trade<br>quarters) .. .. . 4,585,600 | 14,374,301                       |
| Oats (312lbs.) .. 21,172,011                         | Oats.. .. . 5,187,212                                 | 26,359,223                       |
| Beans (480lbs.) .. 1,311,306                         | Beans .. .. . 589,269                                 | 1,900,575                        |
| Peas (480lbs.) .. 734,165                            | Peas.. .. . 569,949                                   | 1,304,114                        |

The consumption of wheat in this country has been estimated by Sir J. B. Lawes at  $5\frac{3}{4}$  bushels *per capita* of the population, which represents, in round numbers, rather more than 26,000,000 quarters. To depend on an extraneous supply for such a large proportion of our daily bread as that shown in the preceding tabular statement is not, to my mind, either national economy or national safety; but of this I am not called upon to speak here, excepting to point out that if we were engaged in a great war the price of wheat would probably be something very different to what it is now, and would certainly be liable to violent fluctuations. To show this more clearly, it may be assumed that we have, normally, say 2,000,000 quarters of wheat, and flour reckoned as wheat, on passage to ports in the United Kingdom, and that we usually have about the same quantity of foreign breadstuffs in water-side granaries at the principal ports of this country. The tidewater stocks, as returned for October, compare as follows with those of the preceding quarterly periods of this year:—

| Date.                 | Wheat.<br>Qrs. | Flour as<br>Wheat.<br>Qrs. (480lbs.) | Total as<br>Wheat.<br>Qrs. |
|-----------------------|----------------|--------------------------------------|----------------------------|
| October 1, 1887 ..... | 1,693,155      | 345,597                              | 2,038,752                  |
| July 1, 1887.....     | 1,559,055      | 624,503                              | 2,183,558                  |
| April 1, 1887 .....   | 1,367,565      | 674,408                              | 2,041,973                  |
| January 1, 1887 ..... | 1,268,433      | 690,028                              | 1,958,461                  |

Then there are the stocks in the hands of merchants and millers inland, and the unmarketed portion of the crop in the hands of growers; with regard to the former,



## THE POSITION OF THE WORLD'S GRAIN TRADE.

there are no data, and in respect of the latter, scarcely any beyond mere guesses at any time of the year. It will be seen, however, that with such a comparatively small native growth, the value of wheat depends entirely on the foreign supply. The native crop has its influence, of course—it is regarded by the trade as equivalent to the displacement of so much foreign wheat and flour—but its influence on values is very much more irregular and uncertain than many might suppose, and dependent to a great extent on the condition in which the crop may have been harvested. Presuming, for example, that we have grown from this last harvest 8,000,000 quarters of wheat available for consumption, the fact of it having been harvested in fine milling condition enables growers to turn it at once into money; whereas, if we had grown 10,000,000 quarters harvested in such condition as to require to stay some months in stack, it is plain that its effect on values would not be anything like so great. The difference of the 2,000,000 quarters is one of immense importance to growers, but none whatever to the trade, who have simply to buy that much more later on from the world's surplus, which appears to be more than ample. In fact, the world is now all one wheat mart, of which London is the centre, and what is done on Mark Lane is known in all the principal markets of the world before the samples are cleared off its stands. Clearly, then, so long as the world's supply keeps in anything like its present proportion, the value of English wheat must be ruled by it.

It will be well at this juncture to show what our imports of wheat and flour have been of late years. The imports of breadstuffs into the United Kingdom during the cereal year 1886-7, as compared with those of the five preceding cereal years, are shown by the following statement:—

| Cereal Year. | Wheat.<br>Qrs.<br>(480lbs.) |      | Flour<br>as Wheat.<br>Qrs.<br>(480lbs.) |      | Total<br>as Wheat.<br>Qrs.<br>(480lbs.) |
|--------------|-----------------------------|------|-----------------------------------------|------|-----------------------------------------|
| 1886-7 ..... | 12,885,065                  | .... | 5,236,145                               | .... | 18,121,210                              |
| 1885-6 ..... | 11,618,353                  | .... | 4,302,895                               | .... | 15,921,248                              |
| 1884-5 ..... | 13,629,496                  | .... | 5,189,700                               | .... | 18,819,196                              |
| 1883-4 ..... | 11,189,771                  | .... | 4,693,865                               | .... | 15,883,636                              |
| 1882-3 ..... | 15,488,551                  | .... | 4,707,821                               | .... | 20,196,372                              |
| 1881-2 ..... | 14,272,387                  | .... | 3,195,577                               | .... | 17,467,964                              |

These figures are not estimates, but returns issued by the Board of Trade in cwts., as taken from the Customs Bill of Entry. They do not agree with the periodical statement in quarters as published by the Board of Trade, because the wheat and flour has been rendered in quarters of 480lbs., whereas the Board of Trade quarters represent  $4\frac{1}{2}$  cwts. of wheat and  $3\frac{1}{2}$  cwts. of flour. I have reckoned 45lbs. of flour to 60lbs. of wheat, or 75 per cent, whereas millers do not usually reckon more than 70 per cent of flour; evidently the Board of Trade 69lbs. of flour to a bushel of wheat is far too high as an average for uncleaned foreign wheats. The following statements for the last three cereal years—September 1 to August 31—will be of interest, inasmuch as the cwts. of the Board of Trade are represented in quarters of 480lbs., few people being accustomed to cwts. in connection with the grain trade:—

## THE POSITION OF THE WORLD'S GRAIN TRADE.

1886-7.

| Wheat.                             | Qrs. (480lbs.)  |
|------------------------------------|-----------------|
| United States—Atlantic ports ..... | 5,116,550       |
| Pacific ports .....                | 2,288,022       |
|                                    | <hr/> 7,404,572 |
| India .....                        | 2,495,939       |
| British North America .....        | 932,818         |
| Russia .....                       | 712,578         |
| Chili .....                        | 501,352         |
| Australasia .....                  | 259,106         |
| Other Countries .....              | 242,034         |
| Germany .....                      | 236,412         |
| Roumania .....                     | 64,679          |
| Egypt .....                        | 30,986          |
| Turkey .....                       | 4,405           |
| France .....                       | 184             |
|                                    | <hr/>           |
| Total Wheat .....                  | 12,885,065      |

| Flour.                      | As Wheat in<br>Qrs. (480lbs.) |
|-----------------------------|-------------------------------|
| United States .....         | 4,349,806                     |
| Austrian Territories .....  | 414,982                       |
| British North America ..... | 310,501                       |
| Germany .....               | 96,538                        |
| Other Countries .....       | 41,078                        |
| France .....                | 23,240                        |
|                             | <hr/> 5,236,145               |
| Total .....                 | 18,121,210                    |

1885-6.

| Wheat.                            | Qrs. (480lbs.)  |
|-----------------------------------|-----------------|
| United States—Pacific ports ..... | 2,505,637       |
| Atlantic ports .....              | 2,375,688       |
|                                   | <hr/> 4,881,325 |
| India .....                       | 2,847,609       |
| Russia .....                      | 1,628,920       |
| Australasia .....                 | 560,999         |
| British North America .....       | 547,713         |
| Chili .....                       | 429,687         |
| Germany .....                     | 424,497         |
| Other Countries .....             | 333,875         |
| Egypt .....                       | 121,826         |
| Turkey .....                      | 120,924         |
| Roumania .....                    | 77,885          |
| France .....                      | 792             |
|                                   | <hr/>           |
| Total Wheat .....                 | 11,976,052      |



## THE POSITION OF THE WORLD'S GRAIN TRADE.

| Flour.                      | As Wheat in<br>Qrs. (480lbs.) |
|-----------------------------|-------------------------------|
| United States .....         | 3,217,731                     |
| Austrian Territories .....  | 466,211                       |
| Germany .....               | 340,944                       |
| British North America ..... | 149,806                       |
| Other Countries .....       | 89,489                        |
| France .....                | 49,847                        |
|                             | <hr/> 4,314,028               |
| Total .....                 | 16,290,080                    |

1884-5.

| Wheat.                             | Qrs. (480lbs.)  |
|------------------------------------|-----------------|
| United States—Atlantic ports ..... | 3,076,163       |
| Pacific ports .....                | 3,050,661       |
|                                    | <hr/> 6,126,824 |
| Russia .....                       | 2,585,847       |
| Indies .....                       | 2,328,838       |
| Australasia .....                  | 1,309,532       |
| British North America .....        | 433,393         |
| Germany .....                      | 386,075         |
| Chili .....                        | 290,388         |
| Other Countries .....              | 272,985         |
| Egypt .....                        | 93,214          |
| Roumania .....                     | 39,186          |
| Turkey .....                       | 9,364           |
| France .....                       | 1,837           |
|                                    | <hr/>           |
| Total Wheat .....                  | 13,877,483      |

| Flour.                      | As Wheat in<br>Qrs. (480lbs.) |
|-----------------------------|-------------------------------|
| United States .....         | 3,864,441                     |
| Austrian Territories .....  | 2,051,103                     |
| Germany .....               | 455,336                       |
| British North America ..... | 145,581                       |
| Other Countries .....       | 133,399                       |
| France .....                | 52,954                        |
|                             | <hr/> 6,702,814               |
| Total .....                 | 20,580,297                    |

It will be convenient in this connection to give the following tabular statement of the imports of wheat and flour, as compiled from the official returns; it will be borne in mind that the years are calendar years—not cereal years, as in the preceding tables:—

## WHEAT, WHEATMEAL, AND FLOUR

## W H E A T.

| COUNTRIES.                          | 1875.         | 1876.         | 1877.         | 1878.         | 1879.          |
|-------------------------------------|---------------|---------------|---------------|---------------|----------------|
|                                     | Cwts.         | Cwts.         | Cwts.         | Cwts.         | Cwts.          |
| Russia { Northern Ports..           | 1,688,035     | 1,977,346     | 6,960,764     | 4,125,785     | 3,044,502      |
| Russia { Southern Ports..           | 8,317,290     | 6,803,282     | 3,867,472     | 4,895,894     | 4,960,089      |
| Sweden .....                        | 99,590        | 58,411        | 33,603        | 16,363        | 20,688         |
| Denmark .....                       | 493,019       | 263,205       | 73,812        | 139,987       | 58,580         |
| Germany .....                       | 5,612,536     | 2,324,148     | 5,455,144     | 5,117,995     | 3,613,878      |
| France .....                        | 1,297,843     | 292,050       | 1,492,768     | 11,196        | 17,291         |
| Spain .....                         | 148,761       | 243,744       | 463,416       | 55,896        | 3,694          |
| Austrian Territories ....           | 18,564        | 4,556         | 42,838        | 11,048        | 19,745         |
| Roumania .....                      | 347,841       | 379,079       | 229,808       | 95,075        | 158,854        |
| Turkey .....                        | 957,965       | 862,884       | 1,022,850     | 145,301       | 11,500         |
| Egypt .....                         | 2,107,859     | 2,223,238     | 2,467,681     | 217,003       | 2,055,697      |
| British North America ..            | 3,622,075     | 2,423,183     | 2,951,891     | 2,620,830     | 4,781,736      |
| U. S. { Atlantic Ports ..           | 14,935,326    | 12,737,096    | 12,522,039    | 24,468,189    | 29,107,312     |
| U. S. { Pacific Ports ....          | 8,587,981     | 6,585,958     | 8,864,941     | 4,592,620     | 6,934,583      |
| Chili .....                         | 884,235       | 982,379       | 736,011       | 50,573        | 1,406,394      |
| British India .....                 | 1,334,366     | 3,287,236     | 6,104,985     | 1,820,881     | 837,006        |
| Australasia .....                   | 1,156,843     | 2,605,550     | 425,697       | 1,453,814     | 2,247,605      |
| Other Countries .....               | 266,388       | 401,312       | 574,080       | 68,034        | 262,641        |
| Total .....                         | 51,876,517    | 44,454,657    | 54,289,800    | 49,906,484    | 59,591,795     |
| Annual Average Gazette Prices ..... | s. d.<br>45 2 | s. d.<br>46 2 | s. d.<br>56 9 | s. d.<br>46 5 | s. d.<br>43 10 |

## WHEATMEAL AND FLOUR.

| COUNTRIES.                 | 1875.     | 1876.     | 1877.     | 1878.     | 1879.      |
|----------------------------|-----------|-----------|-----------|-----------|------------|
|                            | Cwts.     | Cwts.     | Cwts.     | Cwts.     | Cwts.      |
| Russia { Northern Ports..  | 85        | 160       | 76,069    | 5,930     | 810        |
| Russia { Southern Ports..  | 121,933   | 104,768   | 64,476    | 96,847    | 89,506     |
| Sweden .....               | 370       | 7         | 2,280     | 275       | 1,115      |
| Denmark .....              | 271,065   | 471,060   | 477,017   | 398,468   | 397,050    |
| Germany .....              | 800,806   | 930,819   | 1,239,373 | 1,114,852 | 915,133    |
| France .....               | 1,820,747 | 1,089,500 | 1,901,392 | 699,390   | 355,006    |
| Spain .....                | 6,765     | 21,383    | 451,957   | 124,208   | ....       |
| Austrian Territories ....  | 321,302   | 445,626   | 1,034,466 | 1,348,672 | 1,513,092  |
| Roumania .....             | 3,076     | 12,588    | ....      | 7,800     | ....       |
| Turkey .....               | 2,226     | 2,847     | 2,744     | 7,626     | ....       |
| Egypt .....                | 3,423     | 20,811    | 13,092    | 988       | 6,417      |
| British North America ..   | 357,992   | 283,034   | 250,626   | 302,856   | 457,569    |
| U. S. { Atlantic Ports ..  | 1,816,867 | 1,895,061 | 1,161,099 | 3,360,026 | 6,326,266  |
| U. S. { Pacific Ports .... | 462,208   | 425,218   | 604,521   | 261,855   | 535,913    |
| Chili .....                | 14,740    | 24,211    | 59,026    | ....      | 68,518     |
| British India .....        | 6         | 7,471     | 875       | ....      | 2,020      |
| Australasia .....          | 87,123    | 189,320   | 20,324    | 85,754    | 37,638     |
| Other Countries .....      | 45,349    | 36,037    | 17,966    | 12,532    | 22,199     |
| Total .....                | 6,136,083 | 5,959,921 | 7,377,303 | 7,828,079 | 10,728,252 |



## IMPORTED INTO THE UNITED KINGDOM.

## WHEAT.

| 1880.      | 1881.      | 1882.      | 1883.      | 1884.      | 1885.      | 1886.      |
|------------|------------|------------|------------|------------|------------|------------|
| Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      |
| 244,216    | 426,852    | 2,714,982  | 6,555,891  | 2,717,588  | 4,613,436  | 1,785,287  |
| 2,636,108  | 3,619,797  | 6,860,650  | 6,790,871  | 2,684,808  | 7,362,208  | 1,924,812  |
| 5,086      | ....       | ....       | ....       | ....       | ....       | 2,287      |
| 30,641     | 829        | 10,934     | 3,619      | 160        | 3,958      | 29,591     |
| 1,599,143  | 1,361,402  | 3,080,101  | 2,871,095  | 1,090,188  | 1,980,236  | 1,318,053  |
| 1,446      | 6,693      | 7,379      | 9,498      | 19,023     | 2,662      | 2,560      |
| 31         | ....       | ....       | 2,232      | 1,176      | ....       | ....       |
| 11,502     | 10,412     | 15,675     | 27,495     | 85         | 95,024     | 52,475     |
| 126,629    | 214,855    | 197,662    | 403,937    | ....       | 398,709    | 200,248    |
| 4,005      | 29,277     | 525,710    | 1,121,138  | 504,380    | 653,035    | 248,626    |
| 1,601,281  | 1,070,710  | 174,862    | 1,172,206  | 999,764    | 109,983    | 40,632     |
| 3,887,532  | 2,875,606  | 2,689,264  | 1,798,587  | 1,757,435  | 1,745,373  | ....       |
| 29,634,820 | 24,820,246 | 20,396,838 | 14,319,407 | 14,321,997 | 10,165,339 | 13,531,346 |
| 6,555,994  | 11,263,242 | 14,740,335 | 11,809,354 | 8,319,053  | 14,107,513 | 11,089,882 |
| 1,348,206  | 1,094,261  | 1,657,224  | 2,248,788  | 1,055,964  | 1,622,851  | 1,701,695  |
| 3,229,050  | 7,334,616  | 8,461,004  | 11,248,988 | 7,980,831  | 12,170,251 | 11,028,827 |
| 4,246,376  | 2,968,730  | 2,475,127  | 2,683,590  | 5,091,212  | 5,279,232  | 738,699    |
| 99,858     | 50,405     | 233,002    | 1,071,935  | 762,492    | 1,189,053  | 3,559,324  |
| 55,261,924 | 57,147,933 | 64,240,749 | 64,138,631 | 47,306,156 | 61,498,863 | 47,254,344 |
| s. d.      | s. d.      | s. d.      | s. d.      | s. d.      | s. d.      | s. d.      |
| 44 4       | 45 4       | 45 1       | 41 7       | 35 9       | 32 10      | 31 2       |

## WHEATMEAL AND FLOUR.

| 1880.      | 1881.      | 1882.      | 1883.      | 1884.      | 1885.      | 1886.      |
|------------|------------|------------|------------|------------|------------|------------|
| Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      |
| 198        | 77         | 2,836      | 4,208      | 2,024      | 1,542      | 395        |
| 66,549     | 42,582     | 80,611     | 77,077     | 92,419     | 83,856     | 22,215     |
| ....       | ....       | 43,358     | 64,745     | 66,006     | 43,709     | 11,503     |
| 310,616    | 293,745    | 410,778    | 414,527    | 156,730    | 120,146    | 66,587     |
| 977,617    | 1,387,939  | 1,987,720  | 1,928,170  | 1,746,514  | 1,415,171  | 816,737    |
| 297,131    | 203,296    | 220,269    | 163,898    | 154,349    | 187,097    | 114,594    |
| 177        | 250        | 875        | 1,224      | 720        | ....       | ....       |
| 1,123,911  | 1,097,417  | 1,567,313  | 1,738,955  | 1,563,693  | 1,810,719  | 1,362,285  |
| ....       | ....       | ....       | ....       | ....       | ....       | ....       |
| 331        | 19         | 26,323     | 6,423      | 7,360      | 116        | 777        |
| 3,325      | 1,472      | 2,253      | 813        | 1,000      | 200        | 290        |
| 524,700    | 259,862    | 341,204    | 503,864    | 688,780    | 280,002    | ....       |
| 6,444,374  | 6,678,322  | 6,238,319  | 9,662,753  | 8,486,582  | 10,172,849 | 10,057,524 |
| 429,455    | 1,014,852  | 1,561,987  | 1,607,706  | 1,849,899  | 1,559,054  | 1,415,668  |
| 81,714     | 61,422     | 47,687     | 41,814     | 15         | 13         | 3,822      |
| 875        | 3,303      | 2,170      | ....       | 120        | 4,007      | 2,555      |
| 293,582    | 276,648    | 488,929    | 85,250     | 222,517    | 131,485    | 72,692     |
| 21,757     | 36,171     | 34,271     | 17,865     | 56,573     | 22,877     | 791,678    |
| 10,576,312 | 11,357,381 | 13,057,403 | 16,319,292 | 15,095,301 | 15,832,843 | 14,739,322 |

## THE POSITION OF THE WORLD'S GRAIN TRADE.

From these figures the reader will be able to see readily whence our supplies of breadstuffs have been coming of late years. It is generally believed that we shall require to buy at least 17 million quarters of wheat, and flour reckoned as wheat, during the present cereal year. At present there is every prospect of that quantity being easily obtainable. Belgium, together with Holland, will probably require about three million quarters, the other wheat importing countries being France, Italy, Spain, Switzerland, and the West Indies; possibly these countries may require 12 million quarters in the aggregate. I think there can be no doubt as to exporting countries being able to meet this demand easily. The one question is whether they will do so at about the present level of prices. I think they will, and will give my reasons for that opinion.

I believe that the virgin soils of the world, within climatic limits which at present represent the great bulk of the world's productive industry, are better suited to the cultivation of wheat than that of any other food product. I do not wish to enter into any argument as to the natural limits of the "wheat belt" on the map of the world, but I would suggest to those who take any real interest in the subject with which I am so imperfectly attempting to deal that they should seek an opportunity of consulting "big maps," and that they should study them from a mileage point of view. This will enable them to realise the initial data on which the present position of the world's grain trade is really based. The immense areas of cultivable land in the great North-West of the American continent, in Australasia, and in the Argentine Confederation, representing the future of operations undertaken, or to be undertaken, by European immigrant labour—quite outside the present or future capabilities in respect of wheat-production in India, Russia, and some other countries which are at present outside the scope of such influences—constitute, to my mind, factors of immense importance in diagnosing the future of wheat values in this country. Inasmuch as they have already fallen to a level which has had no actual precedent, I fail to see what there is for future guidance, other than the fact that low prices have not checked importation. Out of each depth has come "a lower deep." Five years ago British farmers began to think a 40s. average price for wheat possible; now they are fearing lest a 30s. average should not be maintained. We know that "two converging lines must meet," and it is evident that the price paid by the consumer must, at some point or other, meet the cost of production, otherwise the supplies will cease. Clearly, the cost of growing wheat in this country exceeds the price paid for it, but so long as other countries offer us ample supplies at present rates, so long must prices continue low. The future is, of course, a blank; but I am profoundly impressed with the idea that there is, to say the least, a possibility of values for breadstuffs in this country falling to a level which has not yet been reached. The world's wheat acreage I believe to be increasing, and that it naturally will increase. All young countries will continue to grow a surplus of wheat, and for this they will take time's price in the world's market. The sale of such surplus is clear gain to the community which produces it, and therefore, with freight rates at anything like their present level, low prices for grain must continue.

It will be seen by referring to the table of imports that the United States of America is the source from which we obtain the largest supplies of breadstuffs.



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Taking the three cereal years in which the imports are rendered in quarters, the wheat and flour received from the United States in 1886-7 amounted to 11,754,378 quarters out of a total of 18,121,210 quarters; in 1885-6 it was 8,099,056 quarters out of a total of 16,290,080 quarters; and in 1884-5 the amount was 9,991,265 quarters out of 20,580,297 quarters. The larger table will afford data as to what the proportions have been since 1875. -I think there can be no doubt as to the fact of America ruling the value of wheat here, and I think there is every probability of her continuing to do so in the immediate future. She can probably grow more wheat to sell than any other country can do at the present time; she can probably grow it at as small a cost as any other country can do; and she certainly can market it more quickly if not more cheaply than any other country is in a position to do, or is likely to be for years to come. In this last particular the United States has an immense advantage from a trade point of view over India, Russia, and all her other competitors. I am referring principally to inland transit, but the fact of the greater part of the wheat and flour from Atlantic ports being brought here in "parcels" by the several great steamship companies is, of itself, a very important consideration. With regard to the extent to which the cultivation of wheat can be increased in the United States, it must be borne in mind that the cultivation of new land is dependent on the construction of railways through it. In old countries towns existed before railways were invented; in new countries railways are made first, and towns grow up beside them. It is stated that the new land in the United States thus brought within five miles of the new railroads built during the last twelve months is much greater in area than the whole of England and Wales! Take, for example, the official statements with regard to the development of wheat-growing in Dakota, where there is an area of 96,596,480 acres of fertile prairie land. Its population rose from 135,180 in 1880 to 415,664 in 1885: the area cultivated with wheat, during the same period of five years, increased from 265,298 acres to 2,228,102 acres; and its wheat production from 2,830,289 bushels to 38,166,413 bushels, an average of 17.12 bushels per acre. Others of the vast States and Territories are progressing as rapidly, and there is an immense area of public land suitable for wheat-growing which has not been taken up or settled upon. In Colorado there are 9 million acres yet untouched; in Arizona 12 millions; in California 30 millions; in Dakota—referred to above—40 millions; in Idaho 44 millions; in Utah 41 millions; in Washington Territory 30 millions; in Florida and Minnesota 14 millions; making in these States alone an area more than three times the extent of the United Kingdom. The British Consul at Chicago reported, on the 19th of March this year, that in his district, comprising 899,454 square miles, or 575,650,000 acres in seven States and three Territories in the North-West, the yield of wheat in the year 1886 was 184,289,000 bushels, against 154,079,000 bushels in 1885, while his Vice-Consul at St. Paul, 400 miles further north-west, after remarking that the progress he has witnessed during the last twelve months has never been surpassed in the history of marvellous development in the western world, gives as explanation the statement that "this little basin of operations has been expanded until the field supplied by the wholesale trade of St. Paul stretches straight 2,000 miles to the westward with less than one acre in a hundred yet under cultivation." The Hon. David A. Wells, writing in the

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*Contemporary Review*, makes the following corroborative statement :—" The present entire wheat crop of the United States (37,000,000 acres) could be grown on wheat land of the best quality selected from that part of the State of Texas by which that single State exceeds the present area of the German Empire;" and goes on to say that:—"On the great wheat fields of the territory of Dakota, United States, where machinery is applied to agriculture to such an extent that the requirement of manual labour has been reduced to a minimum, the annual product of one man's labour is understood to be now equivalent to the production of 5,500 bushels (687½ quarters) of wheat; and in the great flour mills of Minnesota the labour of another one man for a year, under similar conditions as regards machinery, is in like manner equivalent to the conversion of this unit of 5,500 bushels of wheat into 1,000 barrels of flour, leaving 500 bushels for seed purposes." I will endeavour to deal with flour separately, and I may point out here that the Canadian North-West presents features in respect of the development of wheat-growing which are analogous to those which characterise the great North-West. The cost of wheat-production in the North-West is altogether a different matter from that of producing wheat, or any other cereal, in such parts of the Union in which there has grown up a residential population, and—consequently—a system of mixed husbandry, after the nature of that necessarily followed in Europe, and all the older-settled portions of the globe. In the United States, the population has increased very rapidly; it has been stated that during the last sixteen years the population has increased 50 per cent, the production of grain 85 per cent, and the length of railways 192 per cent. If these figures are anything like decent approximations, the United States is likely to be able to "feed the world" for many years to come, as Uncle Sam has for some time past been boasting he can do—in fact, he considers this pleasing and profitable occupation to be essentially his own "mission." There are, however, other caterers in the field who can, now and again, undersell him as to values, although the quantities they have to offer are comparatively inconsiderable. For example, Russia is just now (end of October) underselling the United States in our markets. I do not intend to enter into any elaborate calculations as to the cost of growing wheat in the United States: obviously it must vary greatly. On the older settled lands, where wheat growing is only a part of a system of mixed husbandry very similar to that obtaining in this country, the cost of growing wheat is one factor in the entire cost of a rotation of crops; in the "Far West" it is the one sole operation of what is called "Bonanza" farming—that is to say, where immense tracts of virgin soil are broken up by capitalists who avail themselves of the most effective labour-saving appliances from beginning to end. In this connection I may say that there has been of late much natural curiosity on the part of political economists and others in this country to find out what it really does cost to grow wheat under such circumstances as these, and careful inquiries have been made by competent men. As a result of these, I find that not only these "Bonanza" gentlemen, but also private cultivators of the regulation 160 acres, can deliver wheat "on rail" at a cost of 11s. to 13s. per quarter, leaving a fair living profit for their industry. I have not seen any plain statement as to the cost of moving the wheat from the "Far West" to Chicago, Milwaukee, or Duluth, but of late there have



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been through bills of lading from these points to Liverpool—covering rail, canal, lake, and ocean freightage, insurance, and commission—as low as 6s. per quarter of 480lbs. I think I cannot do better than give the following quotation from the *Cincinnati Price Current* of October 13, as it deals directly with the subject under notice :—

In a note to *Dornbusch's Cargoes List*, of September 26, Mr. William J. Harris says:—Your extract from the *North-Western Miller* concerning the cost of wheat growing in the Western States of America, on the bonanza plan, is very interesting. It results that the produce can be delivered to the elevator on the spot at 40 cents per bushel—say 13s. 4d. per quarter. Your information will not be complete until you get the exact cost of removing it from that position to Liverpool by through bill of lading.

The editor of the *Price Current* has obtained from parties in the trade at Chicago the following reply to an inquiry as to cost of transportation of wheat by through bills of lading to Liverpool, with incidental charges :—

CHICAGO, Oct. 11.—Freight to Liverpool on wheat 26.60 cents per 100lb. Cost of loading here, which includes storage, inspection, and insurance to Buffalo, is about  $1\frac{3}{4}$  cents per bushel. The rate of ocean insurance by steamer is 3-10ths to 4-10ths per cent. We figure the present cost as just about 18 cents per bushel. The figures are the same from Milwaukee, and about  $3\frac{1}{2}$  cents per bushel more from Duluth. This is *via* lake and rail to seaboard, on through bill lading.

This implies  $21\frac{1}{2}$  cents per bushel from Duluth to Liverpool. Possibly there are some other small charges to place the grain in the hands of the seller in Liverpool—but 25 cents per bushel undoubtedly more than covers all, on grain from Duluth, including commission to the purchasing agent.

The logic of this information, in conjunction with what is stated as the price at which wheat can be delivered at elevators on the spot in the North-West, where the bonanza farming is carried on, with an allowance for carriage to Duluth, is that Dakota can put wheat into Liverpool at 75 cents per bushel, if the estimate is sound that 40 cents will place it in the interior elevator.

An Ohio man, largely interested in wheat raising in Dakota, said to the editor of the *Price Current* last year that he could profitably raise and deliver wheat in New York at 65 cents per bushel. (Freight and insurance from New York to Liverpool 6 to 8 cents per bushel.) He spoke upon the experience of several crops, as to the cost to him of production. This would be in harmony with the foregoing deductions.

It appears to me that the unknown quantity in the foregoing statement—the cost of bringing wheat from the “elevators” or stores in the “Far West” to the distributing points of Chicago and Duluth—is fully covered by the estimate, inasmuch as the Dakota grower, whose statement is given in the last paragraph of the preceding quotation, gives 2s. 9d. per bushel as the profitable rate at which an average of seasons has enabled him to deliver wheat at New York, and the rate for freight and insurance from New York to Liverpool or London is often as low as 1d. to  $1\frac{1}{2}$ d. per bushel by the Atlantic liners, whilst as much as  $\frac{1}{2}$ d. per bushel has actually been paid by the shipping companies, occasionally, within recent years, for wheat to carry as ballast. Here, then, we are face to face with the astounding fact that under present circumstances the grower of wheat in the “Far West” of the North American Continent—whose business is virtually dependent on the export trade—can lay down his product in Liverpool or London at from 24s. to 28s. per quarter of 480lbs., with 30s. as a maximum rate. The immense importance of this fact—for such I take it to be—lies in the consideration that it is essentially in the “Far West” that the exportable surplus is grown. I wish to emphasise this, because it must follow that in the more settled parts of the Union, say from Chicago to the eastern seaboard, local production goes to meet the demands of local consumption.

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To prove this, I can instance the fact of the through rate for grain from Chicago to Liverpool having of late been less than from Chicago to New York—simply because this western stuff went *viâ* the lake and canal route eastward. I think I have shown the main features of the conditions under which I believe the United States of America can compete in the world's market as a grower of wheat for export, and it only remains to give the official figures published by the Department of Agriculture at Washington in respect of production and distribution for the past six years:—

| Year.     | Production.   | For Food.     | For Seed.   | Exportation. | Total Distribution. |
|-----------|---------------|---------------|-------------|--------------|---------------------|
|           | Bushels.      | Bushels.      | Bushels.    | Bushels.     | Bushels.            |
| 1881 .... | 383,280,090   | 235,249,812   | 55,215,573  | 121,892,389  | 412,357,774         |
| 1882 .... | 504,185,470   | 255,500,000   | 52,770,312  | 147,811,816  | 456,081,628         |
| 1883 .... | 421,086,160   | 259,500,000   | 54,683,389  | 111,534,182  | 425,717,571         |
| 1884 .... | 512,763,900   | 265,000,000   | 55,266,239  | 132,570,367  | 452,836,606         |
| 1885 .... | 357,112,000   | 271,000,000   | 51,474,906  | 94,565,794   | 417,040,700         |
| 1886 .... | 457,218,000   | 277,000,000   | 51,528,658  | 151,789,136  | 480,317,794         |
| Total ..  | 2,635,645,620 | 1,563,249,812 | 320,939,077 | 760,163,684  | 2,644,352,073       |
| Average.  | 439,274,270   | 260,541,635   | 53,489,846  | 126,693,864  | 440,725,346         |

The total output of the United States, winter and spring, wheat crops for 1887 has been published as 450,000,000 bushels, and it is generally believed that the quantity returned for 1886 was under-estimated.

Taking Canada, for convenience, as the next factor to be considered—not in respect of present importance, from a trade point of view, but with regard to future possibilities—the main features of the arguments already advanced will apply to an extent not yet determined. In September of last year, the special correspondent of the *Times* wrote as follows:—

The vast prairie southward and westward of Winnipeg is a garden spot; this prairie in Canada extends hundreds of miles to the west and north-west, its limits being only circumscribed by the mountain spurs of the Rockies. . . . The great Lake Winnipeg has tributaries from lakes and rivers that spread over and drain a basin of some 450,000 square miles (nearly four times the whole surface of the United Kingdom). . . . To open this great prairie various branch lines have been constructed in different directions from Winnipeg. The most extensive of these branches stretch towards the westward and carry out an elaborate plan whereby the region will be traversed by parallel routes located twenty to thirty miles apart, with other branches some distance westward from Winnipeg joining them again with the main line. . . . This will give the great prairie ample railway facilities for a breadth of 100 to 150 miles, with prolongation indefinitely to the westward.

Undoubtedly the extension of railways in the west—the Canadian Pacific, and the proposed Red River Valley Railway—will have the effect of opening up immense areas of virgin wheat land to immigrant European labour. In the eastern portions of the Dominion I am prepared to believe that no great mischief can be done to the English wheat-grower; but the “Far West” is quite another matter. There, the future promises a large production of wheat for export, and I am not one of those who affect to despise Canada as a future exporter of wheat. The quality of



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her grain produce, of all kinds, is of the very finest, and within the next decade I believe her cereal exports will figure largely in our national bills for imported grain, whatever else may happen.

India comes, naturally, as the first consideration after leaving that of the North American Continent. The attention of the whole world has during recent years been so pertinently directed to our Eastern dependency as a wheat-exporting country that I am afraid I shall disappoint many readers by stating, at the onset, that I do not attach very much importance to it at present, or in the immediate future. The Government Department of Agriculture has, during the past few years, done splendid work. We have now carefully-prepared estimates of the acreage and production of the several crops which enable us all to form approximations of the output, whereas down to the end of the last decade, at least, India was to the grain trade quite an "unknown," and altogether unknowable, "quantity." Within the past five years, and especially within the past two years, I think the information supplied by the Revenue and Agricultural Department of the Government of India, at Simla, has merited the unequivocal thanks not only from the grain trade proper, but of the grain-producing interests of the whole world. We all now know something of what none of us knew anything, publicly, say five years ago. This information enables me to modify the ideas I formed when India began to extend her exports of wheat "by leaps and bounds." To give an idea of what I mean, the following tabulated statement will be of service :—

## TOTAL EXPORTS OF WHEAT FROM INDIA.

| Cereal Year.  | Cwts.     | Cereal Year.  | Cwts.      |
|---------------|-----------|---------------|------------|
| 1871-72 ..... | 637,099   | 1879-80 ..... | 2,195,550  |
| 1872-73 ..... | 394,010   | 1880-81 ..... | 7,444,375  |
| 1873-74 ..... | 1,755,954 | 1881-82 ..... | 19,863,520 |
| 1874-75 ..... | 1,069,076 | 1882-83 ..... | 14,144,407 |
| 1875-76 ..... | 2,498,185 | 1883-84 ..... | 20,956,495 |
| 1876-77 ..... | 5,583,336 | 1884-85 ..... | 15,830,754 |
| 1877-78 ..... | 6,340,150 | 1885-86 ..... | 21,060,519 |
| 1878-79 ..... | 1,044,709 |               |            |

The fluctuations which occurred between 1880-81 and 1885-86 caused an uneasy feeling in the trade, and the prevailing uncomfortable idea has since been that no one could form an idea as to what India might do next. The jump from nearly 7½ million cwts. of wheat exported in 1880-81 to nearly 20 million cwts. in 1881-82 astounded all Europe, and there was a scare lest India might go on trebling her exports. It is now apparent that whilst the exports from India may vary greatly year by year, there is no immediate prospect of her being able to sell an overwhelming quantity in any one year for years to come. The final report of the Agricultural Department of the Government of India was dated Simla, June 9 of this year, as follows :—

The normal area under wheat in India is believed to be about 26,000,000 acres, of which the average outturn is estimated roughly at 7,135,000 tons. The whole area

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cultivated in the year 1886-87 is estimated to have been approximately 26,735,484 acres, with a yield of about 6,390,695 tons. The following table compares the actual area and outturn of the provinces enumerated with the area and outturn of average years:—

| Provinces.                            | Supposed<br>Normal Area<br>under Wheat. | Area<br>Ascertained<br>up to end of<br>April, 1887. | Estimated<br>Outturn<br>of Area in<br>Column 3. |
|---------------------------------------|-----------------------------------------|-----------------------------------------------------|-------------------------------------------------|
|                                       | Acres.                                  | Acres.                                              | Tons.                                           |
| Punjab .....                          | 7,000,000                               | 5,943,400                                           | 1,361,915                                       |
| North-Western Provinces and Oudh .... | 5,037,000                               | 4,962,942                                           | 1,732,050                                       |
| Central Provinces .....               | 4,000,000                               | 4,297,949                                           | 860,000                                         |
| Bombay (including Baroda) .....       | 1,883,000                               | 2,860,454                                           | 801,400                                         |
| Berar .....                           | 807,000                                 | 933,938                                             | 133,419                                         |
| Total .....                           | 18,727,000                              | 18,998,683                                          | 4,888,784                                       |

The following table shows the countries to which the Indian wheats have been exported:—

| Countries.            | 1883-84.  | 1884-85. | 1885-86.  | 1886-87.  |
|-----------------------|-----------|----------|-----------|-----------|
|                       | Tons.     | Tons.    | Tons.     | Tons.     |
| United Kingdom .....  | 525,413   | 372,249  | 603,561   | 483,381   |
| Belgium .....         | 129,678   | 86,934   | 133,079   | 120,189   |
| France .....          | 169,895   | 165,748  | 107,262   | 140,184   |
| Holland .....         | 9,637     | 4,627    | 4,296     | 10,347    |
| Italy .....           | 22,276    | 35,045   | 60,913    | 260,615   |
| Egypt .....           | 165,299   | 110,575  | 114,807   | 65,882    |
| Other countries ..... | 25,626    | 17,536   | 29,107    | 32,569    |
| Total .....           | 1,047,824 | 792,714  | 1,053,025 | 1,113,167 |

Now, with regard to India, I have shaken off the idea that she can compete, at present, with the United States in supplying wheat to the United Kingdom. The ryot of India can live on about 2½d. per day; he ploughs his land with a pointed stick; he carries the grain to market on his back; and he clothes himself, mainly, with sunshine. But he cannot compete with the highly-paid labour employed on the "Bonanza" farms of the American "Far West," because of his disadvantage as to transit. That is the "nub" of the whole question, not only as it affects the Indian grower, but growers in all other countries competing with the United States. India has doubtless the natural means of growing for export all the wheat which we consume in the United Kingdom annually; but her resources can only be developed, *pari passu*, with the extension of her railways. Therefore, India is still a far-off, though possible, competitor with the United States as caterer for the breadstuffs supply of the Old World. Not only so, but Indian wheats are "ricey," and have a "beany" aromatic flavour, which would militate against their



use to any much greater extent than now by British millers. Broadly speaking, their chief utility in our markets is to absorb the moisture of native wheats, in the grist; inasmuch as they could not be ground, *per se*, without added moisture.

Russia comes next for consideration. There was a time when Russia supplied the bulk of our extraneous wheat imports. What she has done of late years may be seen from the table of general imports since 1875 inclusive. In the "good old days" the Baltic ports of Russia were our main sources of supply. In those same good old times the winter season used to come regularly, and these ports used to freeze-up in the "fairway" with commendable regularity. Consequently, our grain merchants used to "speculate" in a most legitimate manner for wheat, and other grain, to be shipped before the closing of navigation in the winter and after the opening of navigation in the spring. Now-a-days the Baltic does not freeze with anything approaching orthodox regularity, and the venue has been shifted westward. Not only so, but Southern Russian ports in the Black Sea have rapidly grown into importance in the matter of exports, and their ice-bound season has been shorter and more irregular than that of the Baltic ports. For two winters past they have been intermittently open throughout the ordinary close time. In the matter of wheat-exportation Russia has of late years been making rapid progress by means of railways and canals; and here, again, the assistance of a "big map" will be of advantage to the reader. How long it takes to transport the wheats of Samara to Baltic ports I do not know, but I do know that the wheats of Southern Russia (of this year's growth) have for some weeks past been shipped from Black Sea ports and are now in plentiful supply in the London market; whereas, say, only three years ago the wheats received in this country from Russia were of the previous year's growth. Russia is always in a chronic state of impecuniosity, and she sells wheat, and other cereals, at time's prices in our markets, whatever they may be. The season of 1887 has been a good one in Southern Russia for wheat, and it is being shipped freely at rates which undersell every other description of wheat in the markets, excepting only our native grain, which is much cheaper, *ad valorem*, than any foreign equivalent.

With regard to the rest of the wheat-exporting countries of the world there is really very little to say in this connection. I am not attempting to compile a grain-trade encyclopædia. The aggregate does not amount to any considerable total. I refer my readers to the tables of imports. It is impossible to say what the Australasian colonies may do; all I can say is that with their practically unlimited scope they have not done much yet, although a vast continent of unbroken land lies before them—land which can be broken up and exhaustively cultivated for at least another generation without having resource to anything approaching settled husbandry. I need only call attention to the fact of the immense acreage available—when the railways are made! I may mention that the Australian colonies are adopting the severest form of exhaustive wheat cultivation; and why they should not indefinitely extend it within the present generation—say twenty-five years to come—I fail entirely to see. The settlers, there, have gone through their pioneer hardships, and the whole land of Greater Britain lies at their disposal. To borrow a most significant expression from the late "Artemus Ward," I may

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ask what posterity is ever likely to do for them? There is the virgin land, and if they do not exhaust it to the utmost extent within their means they will have only themselves to blame. That is what they are doing, and this explains their ability to export wheat when the yield per acre has been scarcely more than double the quantity of seed. They must sell their surplus. The Australian wheats are of high colour, and usually come to hand in fine condition. New Zealand wheats are "stronger," but the later harvest season, in a more rainy climate, results in their being landed here often more or less out of condition.

The Argentine Confederation comprises an immense area of land suitable for wheat cultivation, and it has attracted immigrant European labour. The difficulty rests with the instability of the Government. The climate is delightful, and the land "feet deep" in cultivable soil. Only a few years ago the wheat crop was trodden out by horses, whereas now it is threshed out by machinery, and is finding a ready market in Europe—not only in Antwerp, but in Liverpool and in London. I take it to be probable that the Province of Santa Fé, of which Rosario is the chief port, may compete largely with wheat, of good milling quality, in our markets. Those who despise the Argentine Confederation as an important factor in our future wheat supply deceive themselves, from my point of view.

Chili grows wheat of a class which is appreciated in our northern centres of industry, including those of Scotland, as the Californian wheats also are. The hard workers of the north country like *white* bread in the shape of tinned loaves. Liverpool is the distributing port for all the Pacific Coast wheats. A few Californian and Oregon cargoes come to London, with now and again a cargo of Walla-Walla, but Chilian, never, of late years. I cannot, however, enter into any descriptive outline of the purposes to which foreign wheats are put in this country, because that would involve something of the nature of an essay in itself.

Egypt used to be an important source of our extraneous wheat supply, but of late years the quantities exported have been very small. In the cereal year 1886-7, just passed, Egypt sent us only 30,986 quarters, and the remainder of her exports of wheat were taken chiefly by Belgium and Italy.

Persia is beginning to figure in the list of wheat-exporting countries, her grain being similar in character to that grown in India.

The Cape of Good Hope may some day export a wheat surplus, an occasional dribble even now coming to hand; at present Cape Colony imports wheat and flour from Australia.

Now, with regard to Europe, France grows nearly all the bread she eats; she buys but little, and what she wants she buys whenever it is cheap in the off-coast market for floating cargoes. France is, to my mind, the most astute buyer of wheat in the whole world's market. If she wants wheat she buys when it is cheap, without waiting for it to be cheaper. If there is, at any time, a cargo of wheat on sale at our ports-of-call, which is predestinated for slaughter, somehow or other France "calls it home." There is now an import duty of 8s. 9d. per quarter of 480lbs. on imported wheat, and 8s. 6d. per sack of 280lbs. on flour. At the end of October French merchants were re-selling their foreign wheat, afloat, to English buyers. France obtains a regular and considerable proportion of her extraneous supply of wheat from



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India and Russia at the port of Marseilles, and is officially estimated to have grown 37½ million quarters of wheat in 17½ million acres, together with over 8 million quarters of rye, for the cereal year 1886-7. The average annual production of wheat in France is about 35 million quarters.

Germany sends regularly some of her finest wheats from Dantzic and Königsburg to London; and she also sends us flour. She is now meditating further import duties on grain. As a broad rule we may assume that Germany imports a full equivalent of her exports of breadstuffs, so far as quantity is concerned. The quantities of wheat annually received from Germany may be seen from the tables of imports; nearly all comes to London, where these comparatively small quantities, of superb quality, are a regular feature of the trade.

Italy will probably have to import more wheat this year than she has done of late years, owing to the increasing attention paid to the cultivation of the grape and the olive at the expense of that of wheat. During the first six months of the present calendar year the imports of wheat into Italy have been 2,156,000 quarters, as against 1,967,000 quarters in the corresponding period of 1886; and the total imports for the twelve months ended with June 30 have amounted to 4,400,000 quarters, or more than double the usual quantity imported. Italy has been growing about 17,500,000 quarters of wheat annually, and her imports, like those of France, are largely confined to Indian, South Russian, and Danubian descriptions.

The Danubian Provinces are an important source of the wheat supply of this country. (See tables of imports.)

Austria-Hungary exports flour. Her crop of wheat for the 1887 harvest is stated to have been an unusually good one, and that her export of flour may equal 3,000,000 quarters of wheat, during the cereal year of 1887-8.

Spain is supposed to have grown only 10,400,000 quarters of wheat, as against 14,000,000 quarters in 1885. Up to 1877 Spain was an exporter of wheat, but since that time she has imported small quantities. In 1882, the net imports of wheat and flour amounted to 1,173,000 quarters; in 1883, they were 1,084,000 quarters; in 1884, 310,000 quarters; in 1885, 337,000 quarters; and in 1886, 617,000 quarters. For the present year, 1887, they will probably be more. Spain imposes an import duty of 10s. per 480lbs. on wheat.

Reference should be made here to the pernicious system of gambling which has obtained such firm hold on the wheat trade of the United States, and which, after spreading over Europe, has taken root in London and Liverpool. The seller offers what he does not possess, and never intends to possess, whilst the buyer contracts for what he never intends to receive, and at a given date a settlement takes place at the current rates of the day. This is pure gambling. It gives rise to fictitious quotations, and checks legitimate business in many ways. The collapse of the gigantic "corners" in wheat which were worked out this past summer in Chicago and in San Francisco crushed the ringleaders, and brought ruin to thousands. But in time another bubble will be blown, to burst in a similar manner. This "option" business is a cankerous parasite on the trade, those engaged in it being neither carriers nor distributors, but merely useless "dividers," who widen unnecessarily the difference between the price paid by the consumer and that received by the producer.

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With regard to the currency question, I do not profess to understand its bearings on the general commerce of the country, internal and external; but, with regard to the grain trade, I do not see that it in any way influences production in exporting countries. I do not suppose the Indian ryot is affected by the exchange value of his silver rupee, and, as I have already pointed out, any material increase in the cultivation of wheat in that country would seem to depend on an extension of railways. Russia, with her paper roubles, grows what she can, and sells what she has got at time's prices in our markets; she would probably do just the same if her currency consisted of any other form of money. The United States, with her gold standard of currency, swamps all other competitors as an exporter of breadstuffs. Consequently, I fail to see that the currency question either encourages or restricts the cultivation of the land in these countries, and that would form the initial incidence of its bearing on the grain trade, if it has any at all.

## FLOUR.

As with wheat, so with flour, our chief supply comes from the United States; in fact, the alarming increase in our importations of flour is the most serious feature in connection with future outlook for the trade. The growth of the milling industry in the United States has kept pace with the enormous development of that of wheat producing. This feature is one of such great importance that I must beg space for the following tabular statement just published in *Bradstreet's* (New York):—

## EXPORTS OF WHEAT-FLOUR FROM THE UNITED STATES FOR TWENTY-FIVE YEARS.

| To                       | NUMBER OF BARRELS—FIVE-YEAR PERIODS. |                      |                      |                      |                      |
|--------------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------|
|                          | 1861-2<br>to 1866-7.                 | 1867-8<br>to 1872-3. | 1873-4<br>to 1877-8. | 1877-8<br>to 1882-3. | 1882-3<br>to 1886-7. |
| United Kingdom .....     | 5,549,788                            | 3,424,662            | 5,130,838            | 13,419,794           | 26,313,501           |
| Brazil .....             | 1,853,080                            | 1,630,022            | 2,458,255            | 3,031,334            | 3,224,095            |
| British West Indies .... | 1,970,184                            | 1,746,179            | 2,290,419            | 2,431,003            | 2,543,716            |
| Hayti and San Domingo.   | 592,040                              | 272,613              | 723,842              | 700,784              | 687,453              |
| *The Continent. ....     | 199,572                              | 312,715              | 230,159              | 639,443              | 589,807              |
| Ontario and Quebec....   | 4,116,994                            | 2,396,815            | 2,529,675            | 2,324,603            | 3,105,704            |
| Cuba and Porto Rico ...  | 222,675                              | 853,347              | 934,355              | 718,687              | 1,206,687            |
| Other Countries.....     | 2,525,085                            | 2,293,834            | 2,791,451            | 4,628,230            | 5,216,082            |
| Total Barrels Exported.  | 17,029,418                           | 12,930,187           | 17,088,994           | 27,893,878           | 42,887,045           |

\* Spain (Gibraltar), Portugal, Germany, France, and Belgium.

From this it will be seen that we are by far the best customer the United States has for flour; but there are other markets within her reach, and these will be looked up in the future. I shall be doing better service to my readers by giving *verbatim* what such a well-informed American journal as *Bradstreet's* has to say about this than attempting to put the statement into fewer words of my own; I therefore quote as follows:—

The production of flour in the United States and its export thence has enjoyed a remarkable development during recent years, and a larger and larger proportion of the wheat crop shipped abroad annually is being exported in the form of flour.

The freight rates on flour and grain from Chicago to Liverpool have been as low as 19 cents to 23½ cents per 100lb., or less than the rate to Atlantic ports, which has constituted one reason why



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the United Kingdom has taken so large a proportion of foreign flour imports from this country. The flour has been delivered in Europe at such low prices, cost, freight, and insurance, as to successfully compete or undersell even the home millers of the United Kingdom and the Continent, resulting in the closing, in consequence, of a good many of the smaller flour mills in Europe. The large mills of the United States are most of them roller mills, and the yield of flour by this new process is much larger than by the old method of production, consequently millers can afford to sell flour more cheaply than they can the product of the burr-stone mills. The mills at Minneapolis and vicinity make nearly one-sixth of all the flour produced in the United States. The Minneapolis mills alone make about one-twelfth of all the flour manufactured in this country.

The tendency each year is toward increased manufactures of flour. This must necessarily be so from the annual increase of about 1,700,000 in the population; but aside from this the tendency is more and more toward the export of flour in place of wheat. The Continent has not had very much flour from America, and the increase in twenty-five years has been comparatively small.

Hungary, from her geographical position, as well as the tortuous steamer route through the Adriatic, the Mediterranean, and the Atlantic to the United Kingdom and thence, after transshipment, to Brazil, finds a long and comparatively expensive route of shipment in competition with the United States, and this is not only diminishing her export of flour to the Brazils, but to the United Kingdom as well. There are one or two small steamship lines now on the route between New York and the Brazils and the Argentine Republic.

With two or more well-equipped lines of steamships between the United States and South America our flour exports to South American countries could be augmented from the 600,000 or 700,000 barrels annually to 2,000,000 to 2,500,000 barrels.

These statements are undoubtedly correct, and I take the facts to be of immense importance to the farmers and country millers of the United Kingdom. If the reader will refer to the tabular statements given in the earlier part of this paper, he will see from them, individually and collectively, how persistently our imports of flour have been increasing of late years, and that this feature is entirely due to the development of the milling industry of the United States.

A very important feature of the position is the fact that all the best wheats, or nearly all, are retained in the United States for milling purposes. A few years ago No. 1 American red winter wheat formed the bulk of the United States supply of wheat to the London market, but for the last two years No. 1 has practically gone out of quotation, all the supply of winter wheat from the States being No. 2. Small lots of Duluth and No. 1 Milwaukee spring wheats are intermittently on sale, but the great bulk is of No. 2, winter and spring. Still more important is the fact that the grades of flour exported from the United States are, in reality, of the nature of a surplus bye-product. American millers make a high price of their finest grades of flour for home consumption, and consequently they can, with low freight rates, sell their lower grades in our markets at prices with which our millers are quite unable to compete. Nor is this all. These export grades of flour, both from winter and spring wheats, are made of all one kind of wheat, and they come here under brands which represent known uniform qualities. It is true that the standard represented by some of these brands has been lowered of late years, but that does not affect the position at all, excepting in the matter of price. It is the uniformity of make, strength, and colour which render these American flours so readily saleable. The great port millers grind all the wheats of the world, but their flours are an uncertainty to bakers, who prefer to buy country-milled flour from native wheats and do their

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own blending with American or other brands. They have thus something more definite to deal with, and can supplement body, strength, or colour as they may need. But the prices at which these American flours are sold in our markets are simply ruinous to country millers, notwithstanding the fact that our English wheats are at the present time far cheaper than any foreign equivalent, and even the town millers, with their universal grist, cannot compete with them. The consequence of all this is that all our small mills, country mills especially, are being rapidly closed, and the large millers are selling more American flour than that which they grind in their own establishments. Of the immense importations of American flour very little comes directly on the market, the consignments being for the most part to the big millers and bakers; thus the whole trade has become revolutionised. This importation of flour displaces the demand for its equivalent in wheat, and with it the labour formerly employed in the native milling industry. I take this to be a most serious matter, and the loss of the offals is also of importance to the country. Everything points to an increasing proportion of flour to wheat in the future exports from the United States. There is no doubt whatever as to "Uncle Sam" having made up his mind to grind all the wheat he can at home, and export the "product" rather than the raw material, living on the best himself. I wish to emphasise this last statement, because it appears to me to be a factor of importance. Large quantities of low-priced imported breadstuffs certainly tend to lower the price of our home-grown produce; the higher the prices paid by consumers in America for the best, the lower the rates they can afford to accept for the rest. I take it that this feature must develop until consumption overtakes production in the United States; as to when that will be I cannot form an opinion, other than I scarcely expect it to come to pass in my time.

I may mention here that some few years ago an idea was started to the effect that flour might be so greatly reduced in bulk by hydraulic pressure that the cost of transit would be materially lower. The cost of transit has meanwhile gone down to merely nominal rates, without the aid of hydraulic pressure; but I expect it was found that such a process would "kill" the flour, and render it practically useless. Otherwise, I think it would have been done.

Hungary may be said to have been the home of modern improved milling. She first adopted the roller system in lieu of stones, and the product of these mills at the present day is unrivalled for quality. The finest brands of Hungarian flour are simply superb. But Uncle Sam has been to Buda Pesth; he has learned all their secrets; and he makes a "patent" flour, which, if not so good as the Hungarian, does nearly as well for the same particular purposes, and is far cheaper. I need say nothing as to the result! Brazil is an importer of flour, as already noted, and no doubt the United States will get a large share of the trade now belonging to Hungary, but the Province of Buenos Ayres in the Argentine Confederation has a hold upon the Brazilian market which she will be likely not only to keep, but to strengthen. The milling industry is extending there, and great efforts are being made to increase the export of flour to the Brazils. In this battle she will have an advantage over the United States in respect of being close at hand, and in having good existing communication by several lines of European steamers. With her export duties taken off, as proposed, from 1st of January, 1888, she should be able to hold her own for the present.



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Australia sends us some flour, but not much. India has not yet done anything in that way, although some mills have been started, or talked about. I fancy Indian flour will not get into our market quotations just yet. France used to send us some flour, but now she buys a little from the United States.

## MAIZE.

NEXT to wheat, I think there can be no question as to the importance of maize as a cereal, an article of food, and a "source of starch." The world's production of maize is very great, and is still capable of enormous extension. The maize belt comes between that of wheat in the north, and those of cotton and sugar in the south; consequently, it takes in the lower part of the temperate and the whole of the semi-tropical zones. In the United States the production of maize is on an immense scale, and this grain enters largely into the diet of the people, particularly in the Southern States, as "corn flour," or in various granulated forms, such as "hominy." In the United Kingdom maize has become a regular factor in the rations of omnibus and tramway horses, in London and other large towns, and is also used as a source of starch by distillers, and manufacturers of glucoses for brewers' purposes. In London the supply is nearly always of a hand-to-mouth character, and maize is frequently dearer in London and cheaper in Liverpool on the same day, and *vice versa*, according to the spot supply for the moment. Our imports of maize during the past five years have been as follows:—

## IMPORTATION OF MAIZE INTO THE UNITED KINGDOM.

| From                 | 1882.      | 1883.      | 1884.      | 1885.      | 1886.      |
|----------------------|------------|------------|------------|------------|------------|
|                      | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      |
| Russia .....         | 2,713,539  | 1,113,107  | 3,542,634  | 1,680,334  | 3,111,198  |
| France .....         | 22,283     | 2,466      | 50         | 6,086      | ....       |
| Austrian Territories | 28,302     | 73,806     | ....       | ....       | ....       |
| Roumania .....       | 8,407,602  | 5,943,785  | 9,018,307  | 7,343,682  | 7,465,752  |
| Turkey .....         | 509,886    | 781,992    | 1,051,847  | 675,611    | 87,194     |
| Egypt .....          | 484,560    | 78,645     | 1,660,369  | 75,580     | 6,000      |
| British N. America.  | 288,442    | 2,013,559  | 929,240    | 950,519    | ....       |
| United States ....   | 5,089,092  | 21,040,667 | 8,894,960  | 19,502,622 | 16,694,011 |
| Other Countries ..   | 732,025    | 691,079    | 683,957    | 1,292,301  | 3,634,123  |
| Total.....           | 18,275,731 | 31,739,106 | 24,781,364 | 31,526,735 | 30,998,278 |

From this it will be seen that the United States is a very irregular and variable exporter of maize, and, as this is a very important feature in respect of this branch of the grain trade, I think it will be of advantage to give the following table, which shows not only the immense quantities grown there, but the very small percentage of the crop which is exported:—

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## THE PRODUCTION, EXPORTATION, AND CONSUMPTION OF MAIZE IN THE UNITED STATES.

| Fiscal Year ended<br>June 30. | Production.   | Exports.   | Retained<br>for Home<br>Consumption. | Per-<br>centage<br>Exported. |
|-------------------------------|---------------|------------|--------------------------------------|------------------------------|
|                               | Bushels.      | Bushels.   | Bushels.                             |                              |
| 1866-67 .....                 | 867,946,295   | 16,036,263 | 851,945,002                          | 1·85                         |
| 1867-68 .....                 | 768,320,000   | 12,495,786 | 755,874,484                          | 1·63                         |
| 1868-69 .....                 | 906,527,000   | 8,288,685  | 898,329,148                          | ·91                          |
| 1869-70 .....                 | 874,320,000   | 2,140,487  | 872,269,041                          | ·24                          |
| 1870-71 .....                 | 1,094,255,000 | 10,673,553 | 1,083,692,791                        | ·98                          |
| 1871-72 .....                 | 991,898,000   | 35,727,010 | 956,229,558                          | 3·60                         |
| 1872-73 .....                 | 1,092,719,000 | 40,154,374 | 1,052,626,162                        | 3·67                         |
| 1873-74 .....                 | 932,274,000   | 35,985,834 | 896,364,169                          | 3·86                         |
| 1874-75 .....                 | 850,148,500   | 30,025,036 | 820,161,562                          | 3·53                         |
| 1875-76 .....                 | 1,321,069,000 | 50,910,532 | 1,270,210,264                        | 3·85                         |
| 1876-77 .....                 | 1,283,827,000 | 72,652,611 | 1,211,205,291                        | 5·66                         |
| 1877-78 .....                 | 1,342,558,000 | 87,192,110 | 1,255,379,313                        | 6·43                         |
| 1878-79 .....                 | 1,388,218,750 | 87,884,892 | 1,300,367,727                        | 6·33                         |
| 1879-80 .....                 | 1,547,901,790 | 99,572,329 | 1,448,388,337                        | 6·45                         |
| 1880-81 .....                 | 1,717,434,543 | 93,648,147 | 1,623,861,551                        | 5·41                         |
| 1881-82 .....                 | 1,194,916,000 | 44,340,683 | 1,150,644,938                        | 3·77                         |
| 1882-83 .....                 | 1,617,025,100 | 41,655,653 | 1,575,395,436                        | 2·59                         |
| 1883-84 .....                 | 1,551,066,335 | 30,912,713 | 1,520,159,016                        | 1·94                         |
| 1884-85 .....                 | 1,795,528,432 | 52,876,456 | 1,742,656,483                        | 2·99                         |
| 1885-86 .....                 | 1,605,441,000 | 64,829,617 | 1,600,627,487                        | 3·89                         |

If, from any cause, the United States should, in any one year, decide to sell, say, 10 to 15 per cent of her maize crop, and send it here for realisation, the effect on the values of all grain would, in my opinion, be disastrous. At the present time there is a deficiency in the American maize crop, the estimates varying from 134,000,000 bushels to 510,000,000 bushels. This deficiency has been discounted by the trade ever since the effects of the drought on the crop were first recognised; but it has had but little influence on values, because it is known that there have been very large crops in South-Eastern Europe—Southern Russia and the Danubian Provinces, especially—and also in the Argentine Confederation, whence exports are being very freely made. I believe the La Plata States will occupy a very important position as a maize exporting country in the near future; the maize itself is of good quality, and now comes in sound condition, as a rule. Beside South Russia and the Danubian Provinces, as represented by the ports of Odessa and Galatz, we derive supplies of maize from Morocco, Egypt, and India; and the white flat maize—"mealies"—of the Cape of Good Hope is becoming quite common on Mark Lane Market.

I believe that Italy is the only European country in which maize is used, to any extent, as an article of human food, but, as a source of starch, I attach very great importance to the exportable maize surplus in the world's market. Leaving the



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United States and Europe out of the question for the moment, there is the "great dark continent" of Africa, with only a little speck of it cultivated with maize in the north, another in the north-east, and another in the south; it is not all desert between Morocco, Egypt, and Cape Colony, and, as colonisation goes on, the cultivation of maize will naturally be the pioneer industry in Africa.

In our British exchanges maize has of late crept up a little in value, owing to the advent of cold weather increasing immediate consumption, whilst the approach of winter heralds the suspension of navigation in South-Eastern Europe, and the closing of lake and canal navigation in the United States and Canada; in the one case supplies will be interrupted, and in the other freight rates will probably be materially enhanced. During the summer months maize in London was worth only 19s. to 20s. per 480lbs. ex-ship; at the end of September it was worth 20s. to 21s.; and at the end of October 23s. was being paid for sound corn, round and flat. Values may go a shilling or two higher, perhaps; but these rates are simply crushing to our growers of barley and oats, because they rule the prices of imported equivalents. I may be attaching too much importance to it, but, to my mind, maize is, and will be, the great leveller of values in the trade for grain other than wheat.

## RYE.

WE import very little rye, and do not use it as a breadstuff. In 1886 the quantity of rye imported into the United Kingdom was 296,941 cwts.; in 1885, 341,195 cwts.; in 1883, 187,826 cwts.; and in 1882, 305,939 cwts. The quantities have not varied to any material extent for many years past. But on the Continent of Europe rye forms an important feature in the diet of the people, particularly in Russia; in Germany the rye crop is of great national importance, and France last year grew over eight million quarters of rye. Rye, therefore, is to the Continent of Europe what the potato crop is to the United Kingdom, inasmuch as it takes the place of wheaten bread to an extent which is always important, but never clearly demonstrable. Rye has been very low-priced this year, and a short time since some cargoes of Danubian were offered at 15s. per 480lbs.

## RICE.

I HAVE no personal knowledge of the rice trade. Messrs. Fraser and Co., Mincing Lane, in their annual review of the rice trade for 1886, state that quotations ranged throughout that year 6s. to 7s. per cwt. for Rangoon rice. I believe they have been from that time to this about on that basis for uncleaned rice. To show the relationship of rice to other imported articles in the shape of grain and pulse, and their relationship to our home production of these same articles, I cannot do better than give the following tabular statement which I prepared in the autumn of 1884 on the basis of weight in cwts. The calculation is made for the cereal year 1884-5, giving the estimated yield of the 1884 harvest in the United Kingdom, and the imports during the time our native produce was going into consumption—that is to say, between that harvest and the next:—

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HOME PRODUCTION OF CEREALS AND PULSE  
FROM HARVEST OF 1884.

|             | Cwts.      |
|-------------|------------|
| Wheat.....  | 46,179,512 |
| Barley..... | 35,822,436 |
| Oats .....  | 56,389,770 |
| Rye.....    | 992,122    |
| Beans ..... | 6,304,135  |
| Peas .....  | 3,183,324  |

Total .....148,871,299

IMPORTATIONS OF CEREALS AND PULSE IN  
CEREAL YEAR 1884-5.

(September 1, 1884, to August 31, 1885.)

|                                                 | Cwts.       |
|-------------------------------------------------|-------------|
| Wheat.....                                      | 58,412,126  |
| Flour (16,607,039 cwts.) equal<br>to wheat..... | 22,142,719  |
| Total as wheat.....                             | 80,554,845  |
| Barley.....                                     | 16,881,795  |
| Oats .....                                      | 12,109,480  |
| Beans .....                                     | 3,707,725   |
| Peas .....                                      | 2,003,122   |
|                                                 | 115,256,967 |
| Maize .....                                     | 28,902,760  |
| Rice.....                                       | 5,718,118   |

Total .....149,877,845

As a source of starch, rice comes directly into competition with maize in the preparation of glucoses, and in other ways, but not to any appreciable extent as food for stock. Some rice milling is now being done in India, to the detriment of our milling industry here—in fact, the rice millers of this country are becoming apprehensive of future developments in this direction. I may repeat that this table, now three years old, is given solely to show the relative position of rice in our imports, which it does fairly well for comparative purposes.

## BARLEY.

Our importations of barley for the past five years have been as follows:—

## IMPORTATIONS OF BARLEY INTO THE UNITED KINGDOM.

| From                | 1882.      | 1883.      | 1884.      | 1885.      | 1886.      |
|---------------------|------------|------------|------------|------------|------------|
|                     | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      |
| Russia.....         | 4,097,344  | 5,517,059  | 4,965,593  | 6,524,542  | 5,548,459  |
| Sweden .....        | 556,685    | 397,502    | 176,088    | 169,648    | 540,256    |
| Denmark .....       | 1,062,914  | 750,034    | 226,874    | 612,119    | 973,306    |
| Germany.....        | 2,175,536  | 1,794,914  | 724,532    | 609,142    | 1,205,750  |
| France.....         | 909,685    | 1,475,713  | 1,281,262  | 1,424,600  | 1,033,323  |
| Roumania .....      | 5,719,985  | 4,460,601  | 1,401,211  | 2,377,519  | 2,347,898  |
| Turkey .....        | 513,344    | 1,183,051  | 2,403,631  | 1,288,738  | 648,793    |
| Egypt.....          | 48,467     | 95,945     | 225,340    | 62,516     | ..         |
| United States ....  | 47,578     | 118,756    | 226,659    | 135,913    | 49,809     |
| Chili .....         | 6,851      | 52,859     | 291,777    | 152,583    | 165,338    |
| Other Countries ... | 401,723    | 614,904    | 1,030,048  | 2,008,840  | 1,209,677  |
| Total .....         | 15,540,112 | 16,461,338 | 12,953,015 | 15,366,160 | 13,722,609 |



## THE POSITION OF THE WORLD'S GRAIN TRADE.

Amongst the "other countries" in the preceding tabular statement is Persia, from which source a considerable supply has been received during the past few years. Persian barley is small, flinty, and contains a percentage of black grains, but it is particularly white inside, and consequently makes excellent meal. At the low rates which have been current, 15s. to 16s. per 400lbs., this article has maintained a ready sale. There has not been any in the market for some months past. It will be seen that Russia and the Danubian Provinces are the chief sources of supply, and these barleys are all for grinding and distilling purposes. At the end of October they were worth 15s. to 16s. per 400lbs. ex-warehouse in London. Smyrna has taken up a position in the barley trade, and very considerable quantities of malt are also imported from that source; these barleys have been selling in London at from 21s. to 24s. per 400lbs. The French, Danish, Hungarian, and German barleys imported here are all for malting purposes. Some of these, such as from the Saale and Stettin districts of Germany, are of very fine quality, and the Danish Government has of late been devoting State aid to the perfection of the native growths. At the Newcastle meeting of the Royal Agricultural Society in July last, there was a National Exhibit of Danish barleys which showed that the best-known varieties had been brought to very high perfection. Bohemian and Moravian barleys are also imported for malting purposes. Brewers complain that our English barleys are too nitrogenous for their purposes, and say they have to resort to foreign descriptions. This may be so, but I am inclined to believe that these "purposes" are not consistent with the use of barley malt to the extent to which it was used before the repeal of the malt tax, or rather the shifting of its incidence from malt to beer. The national beverage is now "a fermented saccharine solution to which a bittering principle has been added;" and therefore does not necessarily contain either malt or hops. I mention this not so much in reference to the preference declared by brewers for foreign barleys, but to show the bearing of the extensive use of glucoses on the importation of foreign starches in the shape of maize and rice, from which they are chiefly derived. In the table of imports and home production of grain in 1886-7, rendered in quarters—and also in the one for 1884, which is rendered in cwt.s.—it will be seen that the quantity of barley grown at home is about double that imported; yet the low rates and large available supplies of foreign grinding and distilling descriptions pull down the price of the native product, only a comparatively small proportion of which classes as fine maltings.

## OATS.

THE greater part of the foreign import trade belongs to the port of London, and, as it will be seen, Russia and Sweden are the great sources of supply. A large proportion of these oats are very light, but they are all sold by weight, 304lbs. and 320lbs. to the quarter (38lbs. and 40lbs. per bushel). Large quantities of these light Russian oats have been selling in London at from 9s. 9d. to 10s. 6d. per 304lbs. ex-ship, and at the end of October about 10s. 9d. was the value. Now, what is true respecting the influence of low-priced foreign barleys on home-grown produce is even more pronounced in the case of oats, where the weight represented is half husk.

## THE POSITION OF THE WORLD'S GRAIN TRADE.

These London quotations unduly rule the country markets when native grain of far greater natural weight is sold per Imperial measure, especially when it is considered that we import only about one-quarter the quantity we grow, as will be seen on reference to the table of Home Production and Foreign Importations in 1886-7, and that for 1884. Canadian oats come chiefly from Prince Edward's Island, and are of good natural weight. New Zealand oats are very fine and heavy, weighing up to 48lbs. and even 50lbs. per bushel natural weight.

Our imports of oats during the past five years have been as follows:—

## IMPORTS OF OATS INTO THE UNITED KINGDOM.

| From                | 1882.      | 1883.      | 1884.      | 1885.      | 1886.      |
|---------------------|------------|------------|------------|------------|------------|
|                     | Cwts.      | Cwts.      | Cwts.      | Cwts.      | Cwts.      |
| Russia .....        | 8,471,227  | 9,030,383  | 9,357,189  | 6,411,246  | 7,224,397  |
| Sweden .....        | 4,042,283  | 4,723,901  | 2,413,791  | 3,690,286  | 4,090,829  |
| Denmark .....       | 108,235    | 302,556    | 27,049     | 63,146     | 107,832    |
| Germany .....       | 595,125    | 632,759    | 275,042    | 95,836     | 331,309    |
| Holland .....       | 151,952    | 195,926    | 225,575    | 291,402    | 350,567    |
| France .....        | 10,359     | 25,765     | 6,177      | 4,916      | 4,072      |
| British N. America. | 184,754    | 89,351     | 277,948    | 758,210    | ..         |
| United States ....  | 177        | 97         | 251,075    | 1,453,541  | 412,659    |
| Other Countries.... | 74,345     | 136,802    | 88,023     | 288,606    | 973,525    |
| Total.....          | 13,638,457 | 15,137,540 | 12,921,869 | 13,057,189 | 13,495,190 |

## BEANS AND PEAS.

By far the largest proportion of our imports of beans comes from Egypt; the remainder is chiefly from Morocco, Turkey, and Germany. White peas come from Canada and the Baltic provinces of Russia. From India we get blue peas, and mutton peas (a sort of vetch), classed as dhol, and also lentils; but the bulk of the latter comes from Egypt. The total imports of pulse are not very large, as will be seen from the tables to which I have referred in the preceding connection.

## SUMMARY.

IN concluding this imperfect outline of what I believe to be the general position of the grain trade of this country, I must summarise the deductions from the statements I have made. It seems to me that the cultivation of wheat for export, over and above the wants of the community, must, for years to come, be the main pioneer industry in the United States, Canada, Australasia, and some other young countries where there is an immense area of virgin soil yet unbroken, wheat being the most suitable crop to grow, and the most readily marketable. Older countries will continue to export grain as they may be able, and as they can find a market for it. The United States will be likely to export an ever-increasing volume of flour. The extension of railways, the construction of canals, and the enormous development of the steamship tonnage of the world will tend further to



## THE POSITION OF THE WORLD'S GRAIN TRADE.

accelerate transit and keep down its cost. That being so, our home production of all grain will tend to further restriction year by year, and the national bill for imported food will be yearly augmented. Whether or not such a state of affairs, present and prospective, represents national economy, even in time of peace, is one which does not come within the legitimate scope of this paper. I have not been dealing with the position of agriculture, but with the position of the grain trade. I may point out, however, that within the past sixteen years the area devoted to the cultivation of grain and pulse crops in the United Kingdom has decreased by nearly two million acres, the greater part of which, I fear, has been allowed to seed itself down to weed pastures. At all events it will require the expenditure of millions of money to bring it back to anything like a decent state of cultivation.

I find that the cost of imported breadstuffs in 1886-7, as estimated in the Board of Trade Returns, has been £21,855,770 for wheat, and £9,441,228 for flour, together £31,296,998. In 1885-6 the estimated expenditure was £18,616,717 for wheat, and £7,938,044 for flour, together £26,554,761 for breadstuffs. These values are, of course, mere estimates, and we have no means of judging of their trustworthiness as approximations; but as relative comparisons they are instructive. I am inclined to think that some of my readers, taking an unprejudiced view of the whole situation, may possibly come to the conclusion that it would at least be safer to grow more wheat at home. However that may be, so long as we have peace we may confidently expect to be able to buy wheat, and I can see nothing in the immediate future in the shape of natural causes which is to *prevent* values, all round, sinking to a level not yet touched in the history of the trade. Whether they will or not remains to be seen. With regard to other articles it is not—as in the case of wheat—the actual quantities imported which rule values for native produce, but the quantities available for export in foreign countries. The result is the same; namely, that all our grain is practically measured and sold in foreign bushels. The grain trade has held its own through several years of unprecedented losses in a manner which has, I believe, no equivalent in respect of the other branches of British commerce. There has scarcely been a failure of importance throughout this trying time within the grain trade proper, and this is saying a great deal; there have been heavy failures, but in each case they covered other ground. I wish I could say the same of agriculture. The outlook there is appalling, and I cannot, as yet, discern so much as an indication of the silver lining which presumably underlies this as well as all other clouds.

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## INSURANCE : AND WHAT IS WORTH KNOWING ABOUT IT.

BY THOMAS RIGBYE GLOVER.\*

IT is now a few thousand years since King Solomon stated that there was nothing new under the sun. The more we study the past, and the economy of the whole animal kingdom, the more apparent is the truth of the wise king's utterance.

Wonderful progress has been made in every direction in this the nineteenth century, yet, boast as we may, inquiry only shows that the actual ideas upon which nearly all our progress is based originated thousands of years ago. After all, we of this age have only accelerated the progress of improvement. Nothing, apparently, can be discovered which has not been observed before. "There is nothing new under the sun." What about manufacturing textile fabrics, but that we have simply applied previously-known forces to drive the spinning wheel, or its spindle and the shuttle, quicker; we can make more cloth with less labour than was exercised thousands of years ago, but we cannot make it better, if as good.

Insurance is co-operation in its fullest sense, and co-operation is really as old as the human race, as found in its family and tribal relations. Apart from the antiquity of co-operation or insurance, as adopted by the human family, Solomon, about three thousand years ago, thus advised: "Go to the ant, thou sluggard; consider her ways, and be wise." Sir John Lubbock, chief among moderns, has considered her ways, with the result of showing that, in ideas and systems of government and co-operation, we could probably learn as much from ants as ants—if that were possible—could learn from us.

Comparative moderns have been credited with the invention or discovery of aids to commerce. Double-entry bookkeeping, for instance, is asserted to have been a fifteenth-century invention, or device; yet evidence exists in the old Latin authors that the Romans, at one time masters of the world, practised it two thousand years ago. It is on record that the system of marine insurance was known to be practised by these old masters in A.D. 41. The merchants of old Rome, even as compared with us moderns, appear to have transacted no mean business, judging from the fact that the Roman Government, when it held the country, drew from Customs duties at Alexandria alone 30,000,000 livres per annum, or about £2,250,000 of our sterling. Doubtless the predecessors of Rome, at Tyre and Carthage, had their aids to commerce in like manner to ancient Rome, and possibly Rome may even have adopted the system of insurance from them.

It is difficult to form an estimate of the amount of insurance tax, or premium, which our merchants and shipowners pay annually for recouping the losses they may sustain to their property whilst it is at sea, owing to the large, if not the largest, portion of the insurances being effected through private underwriters or members of Lloyd's, and by mutual associations which do not publish accounts.

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\* Author of work on "Compilation of Fire Insurance Statistics and Insurance Bookkeeping," published at £10. 10s. per copy, by subscription of the leading Fire Insurance Offices.



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Judging, however, from the published accounts of the proprietary joint-stock marine insurance companies, and other information, it may be estimated that not less than £15,000,000 per annum is the present aggregate amount collected upon marine insurance policies. Prior to 1720, the business of marine insurance in this country was entirely in the hands of private underwriters. In this year, however (1720), the Corporation of the London Assurance (better known as the London Assurance Corporation) and the Royal Exchange Assurance Company commenced issuing marine insurance policies. It is a commentary upon the Government methods of those days to mention the fact that both of the companies got the Government to accept £100,000 from each as payment for granting them the sole monopoly of joint-stock company marine insurance for 100 years, or until 1820, and which monopoly they held for the full term, as it is only subsequent to 1820 that our numerous marine insurance offices can date their establishment. The days are past for such transactions, or the creation of drags to the wheels of commerce in a like direct way. Drags, however, of other kinds appear to exist in present times. The buyers of marine policies, no doubt, were subsequently charged the £200,000 the offices paid for their monopoly. The Manchester Canal Company had to pay some £300,000 for its Act of Parliament, which will have to be paid by someone, most probably those who will pay dues for using the canal. The drag of £300,000 upon the canal will be still there, however, just as much as if the money went into the Government Treasury direct, as with the 1720 monopoly, instead of what is termed Parliamentary expenses, which seem unnecessarily extravagant.

If that fire at Rome, at which Nero is said to have fiddled, did not have the effect of drawing attention to, or evolving a system of Fire Insurance, the great fire of London did so, hence we have the Hand-in-Hand, established in 1696, and the Union and the Sun, established a few years later, all of which have continued working Fire Insurance business up to date. The Hand-in-Hand, as the oldest established existing Fire Insurance Society in the world, was started upon, and is still continued on purely mutual or co-operative principles ; and as will be seen further on, the oldest existing Life Assurance Society in Great Britain was also started in 1762, upon, and is still continued on the purely mutual or co-operative plan. The Hand-in-Hand charges about the same rates for Fire Insurance as proprietary offices, and returns to its insurers 15 per cent of their premiums annually ; yet notwithstanding this great advantage which is obtained by those holding its policies, and the reputation that it has been in the business nearly two centuries, and is the oldest office, it only collected last year £67,089 in fire premiums, whilst many more modern offices, in which shareholders absorb the profits, collected last year such total fire premiums as £756,292, £955,040, £1,142,730, and £1,289,595 respectively. These figures, and others which will be given further on, emphasise the fact that insurers, through lack of knowledge on insurance matters, pay away hundreds of thousands of pounds, which go to insurance office shareholders in inordinately high dividends, on unnecessary capital, *instead of the dividends now paid, returning, as under a co-operative system, to policyholders, as premium paid, in excess of what is naturally required to pay claims and administration expenses.* About fifty-nine fire offices exist in the three kingdoms, most of which transact Life, Marine, or other Insurance business ; four

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of these, which do not publish accounts, transact fire business only, but the fifty-five combined, as per a statement compiled by the writer, showed the following total results for last years, 1886-7, viz. :—

|                                                                                                                                                                       |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Shareholders' Capital paid-up in cash, or added to from profit                                                                                                        | £8,340,639  |
| Total Assets or Fire Funds possessed by office, exclusive of<br>Shareholders' Capital, and Life Funds as at close of year.                                            | 19,020,715  |
| <hr/>                                                                                                                                                                 |             |
| Total Net Fire Premiums received in year closing in 1886-7..                                                                                                          | 12,681,982  |
| Total Interest, Fees, &c., and gain on realisation or revaluation<br>of assets, less Income Tax, bad debts, and loss on<br>realisation, or revaluation of assets..... | 988,784     |
| Profit transferred from Life or other branch of insurance<br>business which offices transact.....                                                                     | 285,842     |
| <hr/>                                                                                                                                                                 |             |
| Total income of fifty-five offices combined....                                                                                                                       | £13,956,608 |
| <hr/>                                                                                                                                                                 |             |
| Total Net Losses .....                                                                                                                                                | £7,545,619  |
| „ Commission paid to agents and brokers ....                                                                                                                          | £1,957,782  |
| „ Management expenses .....                                                                                                                                           | 2,009,061   |
| <hr/>                                                                                                                                                                 |             |
| „ Dividends to shareholders .....                                                                                                                                     | 1,667,973   |
| „ „ or bonuses to policyholders .....                                                                                                                                 | 50,856      |
| <hr/>                                                                                                                                                                 |             |
| „ Amount or balance carried forward to profit and loss or<br>reserve fund accounts .....                                                                              | 725,318     |
| <hr/>                                                                                                                                                                 |             |
| Total outgo of fifty-five offices combined, inclusive of above<br>amounts carried to credit of following year .....                                                   | £13,956,609 |

Fire Insurance is an indispensable adjunct to trade and social life, and an analysis of the above figures shows that in no other aid to commerce, manufacture, or trade, is there so much room for co-operative principles being applied for the purpose of more economical administration.

A total premium of £12,681,982 is the monetary tax paid by fire insurers to secure £7,545,619 for recouping or indemnifying the value of property actually destroyed. Surely £5,136,363, or more than 40 per cent, is too much, as compared with other businesses, to pay for cost of collection, administration, and profit on the transaction of the business.

Suppose the Government, say through the Post-office (it would not be more difficult than its administration of the Post-office Savings Bank), conducted the whole Fire Insurance system of the country, what a deserved outcry there would be on the part of policyholders if the cost of collection and administration was, say, 40 per cent. Even suppose it was 30 per cent, and 10 per cent went into the Government exchequer, it would relieve taxpayers to that extent.



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The writer is not advocating Government interference, but is using illustrations to show insurers that they voluntarily overtax themselves in the matter of insurance by giving their insurances to offices without first troubling themselves to ascertain how and where their premium will go.

The cash capital of the fifty-five combined offices is found to be £8,340,639, much of which has been added from profits in past years. The shareholders' dividends last year (1886-7) were £1,667,973; the amount to profit and loss or reserve was £725,318; together, £2,393,291. *Is not about 29 per cent per annum rather too much to pay for capital which is actually as useless for insurance operations as a fifth wheel would be to a coach?* Policyholders are always called upon to pay in advance, and thus, themselves, provide all the working capital requisite, if affairs be conducted economically and judiciously.

The writer, from the nature of this publication, has to address himself less to the general public than to the 803,747 members of co-operative societies; and as far as the members require the protection of Fire Insurance, he must, and he can, without partiality, advise them, for the following reasons, to transfer or effect their business through the Co-operative Insurance Company Limited, whose chief office is at City Buildings, Corporation Street, Manchester, viz.:—

It has stood the test of time, having been established in 1867.

It has been economically managed, and consequently holds an accumulated reserve fund to meet extraordinary claims, or claims greater in extent than those hitherto experienced by itself and fire insurance offices generally. After providing for liability on current risks, it has a surplus profit reserve of considerably more than a year's fire premium income, consequently very few offices in this respect exceed it in stability.

Its capital, whilst being adequate, is only £12,227, therefore the dividend of 5 per cent, as usually paid, is only a nominal charge upon the business transacted. Further, this capital is almost exclusively held by co-operative societies, thus—

|                                              |    |   |   |                |
|----------------------------------------------|----|---|---|----------------|
| In North-Western Section, 129 societies hold |    |   |   | 22,200 shares. |
| „ Scottish                                   | 33 | „ | „ | 1,140 „        |
| „ Midland                                    | 32 | „ | „ | 790 „          |
| „ Northern                                   | 34 | „ | „ | 1,875 „        |
| „ Southern                                   | 28 | „ | „ | 590 „          |
| „ Western                                    | 4  | „ | „ | 145 „          |
|                                              |    |   |   | <hr/>          |
| 260                                          |    |   |   | 26,740         |
| 60 individuals hold                          |    |   |   | 2,280 „        |
|                                              |    |   |   | <hr/>          |
| 320 shareholders „                           |    |   |   | 29,020 „       |

Four shillings only per share has been called up, making .....£5,804

But more than four shillings per share appears to have been voluntarily paid, and the capital account is credited therefor by ..... 6,423

Thus making the cash capital of .....£12,227  
before mentioned.

As co-operative societies thus hold nearly the whole of the capital, members of societies must reap the benefit of the profits made on the insurances given to the office, almost as directly as if it paid individual instead of collective bonuses in the way of dividend on capital.

The more members of co-operative societies support *their own* insurance office, the less will be its *pro-rata* expenses for administration, and the greater will the dividends returnable to the societies amount to ; of which members, collectively, will receive benefit instead of such profits going to swell such inordinately high dividends as are generally paid to shareholders of other offices.

A Fire Insurance Policy costs next to nothing. For instance, if a co-operator has a hundred pounds worth of furniture insured, and the whole is consumed by fire, he practically secures indemnity when he receives his claim for what has cost him only one thousandth part of that claim.

Considering the small cost of a Fire Insurance Policy, the public are strangely neglectful. Taking the statistics published by the Manchester Fire Brigade for a twenty years' period, it is found that out of all the fires which occurred in that city, not more than sixty-five out of every hundred had taken the precaution of insuring their property, therefore about 35 per cent were practically self-insurers, and, as such, had to bear the whole brunt of the loss themselves as best they might. What this may have meant to several thousand sufferers is beyond ordinary calculation.

Many otherwise shrewd people think that only ordinary precautions are required to make loss by fire next to impossible. For the benefit of such it may be pointed out that the fire brigade statistics of most large towns or cities show that 25 to 30 per cent of the fires which occur from ascertained causes, are afterwards traceable to defective construction of dwelling-houses and other buildings. For instance, it is a common practice for bare joists to be run into flues, for hearths to be laid on wood, and for other defects to occur which, practically, are out of sight ; therefore, how can the most careful be expected to protect themselves from such hidden and dangerous fire-traps. So great, over a series of years, were the number of fires (33 per cent) occurring from defective construction of hearths and flues in Glasgow, that the authorities intended applying for powers to secure a more stringent inspection of buildings whilst in course of construction ; but even with such powers, the result must still be that buildings already erected could not possibly be efficiently inspected and improved ; therefore, it would be a matter of generations to entirely eliminate this single element of fire risk from the city. Again, whilst human nature remains what it is, carelessness will always be a factor to be reckoned with. For instance, judging from the number of gas explosions which are constantly recurring, the average mind seems to rush to the conclusion when an escape of gas is palpable to the sense of smell that the best way of discovering where the escape arises is to take a light to look for it, and then a smash, and perhaps fire to follow, if not also great personal injury or death. So it is with fire accidents : nothing seems to teach caution to most people. Unseen dangers seem to lurk everywhere, spontaneous ignition or combustion of various substances—oily waste, for instance. An innocent-looking water bottle may act as an incendiary by focussing the sun's rays, and set a fire going. A case in point in this direction has just occurred. In an optician's shop



window, a magnifying or spectacle glass got into a focus with the sun, and set fire to the window blind, &c. A passer-by, however, luckily saw the occurrence, of which the occupant of the shop was himself ignorant, and gave an alarm before much damage was done. The writer, in his time, has had to compile all kinds of statistics for a very large insurance office, and he found that, practically, out of every thousand insurances, all classes of risk combined, fifteen fires were certain to occur annually. In some special classes of manufacture, the ratio would run as high as seventy per thousand, whilst in some common hazards the ratio would not much exceed ten per thousand. The moral of the whole of the writer's observations is, that however solvent anyone may think himself, in an ordinary sense, he is running great pecuniary risks if his property is uninsured. *Practically, a man's credit is as open to question if he has not covered his property from fire loss, as if he had insufficient assets to cover his liabilities.* It behoves everyone to look to the matter of Fire Insurance, as a collateral security to creditors for engagements being met in full. As already pointed out, however, the insurance in these days of keen competition should be in an office which will grant a policy on the lowest terms compatible with safety. A man in trade does not always give his orders to the first traveller who calls upon him, irrespective of price and quality; in fact, he often finds it necessary to seek the seller, instead of waiting for the seller to seek him, if he wishes to make his requisite purchases on the best possible terms for himself. So with Fire Insurance: the offices which practically benefit insurers most, must be selected or sought out. For instance, the Hand-in-Hand, as a purely mutual or co-operative Fire Insurance Society, gives more advantageous terms to policyholders, yet it does not transact as much as one-tenth the business of some of its modern rivals. Co-operative-society members, however, will be best served by their own special company, and the general public, as a rule, by ordinary mutual or co-operative Insurance Offices.

To members of co-operative societies, what is known as Life Insurance, particularly the industrial section of it, must naturally possess more practical interest than other systems. The writer will, therefore, at once proceed to treat upon the subject at some length.

The practice of Life Assurance is of somewhat more modern date than that of Fire Insurance. The oldest existing Life Assurance Society—the Equitable—commenced its operations in 1762, and, like its first compeer in Fire Insurance, it was established on the purely mutual, or co-operative system, and still continues to work on that system. It is an office which must be sought out, as its boast is that it never advertises nor employs agents, and thus saves the considerable item of commission, &c. As compared with some of its competitors, the pecuniary advantages accruing to its policyholders, through a low ratio of management expenses and interest on large accumulated funds (which would otherwise have been distributed as bonuses amongst past generations of policyholders had the present experience of life contingencies been then known), are startling in their amounts.

It was nothing else than the want of a reliable table of mortality which kept back the establishment of the Life Assurance system. Compound interest tables, adaptable to the calculation of rates of premium, were framed as far back as 1706 by a Mr. Smart, the then Town Clerk of London.

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The progress which the Life Assurance system has made within even the past fifteen to twenty years is most remarkable, as will be seen from the following figures, viz. :—

Taking the existing seventy-nine offices then and now actively prosecuting ordinary Life Assurance, as apart from industrial business, it is found that they had accumulated funds in hand belonging exclusively to policyholders and annuitants at the credit of their first revenue accounts, published in blue books pursuant to the Life Assurance Companies Act, 1870, the sum of.... £76,331,446 17 1

Whilst at the close of their last published accounts

their combined accumulated funds had risen to.. 139,340,241 18 4

The increase between the two terms, averaging seven-  
teen years, being ..... 63,008,795 1 3

In the same term the seventy-nine offices received, in  
Life Assurance premiums alone, the sum of ..... 194,968,833 17 2

And paid in claims on life policies, inclusive of surrender  
values and cash bonuses ..... 185,870,925 17 11

The interest earned in the term on the continuously  
accumulating funds was ..... 88,897,170 10 2

The claims paid on matured policies, apart from surrenders and cash bonuses, was £162,603,657. 5s. 2d., and no one can contemplate this vast sum without thinking of the good effected, or the poverty and misery saved to at least 325,000 families, through some provision having been made for them by means of Life Assurance policies.

As a set-off against this immense amount of derived benefit, insurers have paid to badly-conducted, and therefore rotten offices, in years subsequent to the passage of the 1870 Life Assurance Companies Act, fully £8,000,000 of premium, which has almost literally been thrown away as far as the true object of insurance is concerned. This £8,000,000 does not, however, cover the full loss to insurers in these offices, as payments for insurance prior to the 1870 Act had been in most cases previously absorbed, or partially absorbed, to a serious total extent in reckless or extravagant management.

Directors of insurance offices, as a rule, get extravagant fees for managing a business, of the first principles of which experience seems to prove, as in the case of such offices as the Albert and European, and other like subsequent failures, they are entirely ignorant. The science of insurance, as laid down by properly-framed tables, say the last outcome of actuarial experience, "The Institute Tables," show that the average premiums obtained from insurers on the *with profit* scale of charges, under which the majority of policies are issued, should be approximately dispensed as follows, viz. :—

73·72 per cent of the premium paid by policyholders should be set aside as an intact trust, as being absolutely requisite to meet the face value of the contracts entered into with policyholders, or, say, the simple amount assured for which the policy is first issued.



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- 12·12 per cent, calculated on the basis of the premiums paid by policyholders who take out ordinary non-profit assurances, should cover the whole of the administration expenses, as well as by economy serve to secure a margin of profit to the office and its partners, the participating policyholders.
- 14·16 per cent should be set aside as being morally quite as intact a trust as the first-mentioned 73·72 per cent, which is required to meet the sum assured set down on the face of every policy ; the 14·16 per cent being an amount contributed to the capital of the office for the privilege of sharing in the profit realisable from the expenses of administration, being less than calculated upon in the second ratio here set down and allowed for in calculating the original premium charges. A further source of profit is expected to be realised from the actual rate of interest accruing to the office in excess of the arbitrary rate of interest used in calculating the premiums charged, say that which is realised over and above  $3\frac{1}{2}$  per cent.

If the directors of an office allow any departure from a strictly equitable dispensation of policyholders' contributions or premiums, they are as morally, if not as legally, guilty of fraud as an employé or partner of a firm who embezzles the firm's funds ; and everyone knows that in ordinary commercial life a man who defrauds a partner is a criminal who, on conviction, may be sentenced to a long term of penal servitude. Notwithstanding this plain, easily ascertained, and easily understood principle of the *meum* and *tuum* of a policyholder's contribution to the funds of an Assurance Office, we find directors of offices actively seeking business, sanctioning administration expense ratios of 17, 19, 20, 23, 25, 26, 29, and even 43 per cent of policyholders' contributions or premiums.

As a consequence of reckless expenditure, more than a score of offices have ceased their existence since the passage of the Life Assurance Companies Act of 1870. Amongst the most recent liquidations consequent, not upon the actually farcical but commonly-supposed protective measures which the Act was ostensibly framed to furnish to policyholders, but from sheer innate weakness. One office over a series of years spent 28·6 per cent of its policyholders' contributions, another office over its whole history of eleven years spent 72·25 per cent of what it obtained from its policyholders, another again spent 44 per cent, and yet another 92·34 per cent. Such turpitude on the part of directors is a pretty commentary upon the legislation which was effected to pacify a community which was naturally indignant at the Albert and European disclosures.

The end is not yet ; directors of offices are daily sanctioning a rate of expenditure which will eventually land their offices in the Court of Chancery, but, as a Life Assurance policy is practically a bill drawn at a very long date against constantly-recurring cash drafts upon it until it matures, the crash may be averted until the bill or bills attain maturity. It appears to be the duty of no one to specially intervene in the matter of securing policyholders from loss in unsafely-conducted offices ; the law itself is no protection, except so far as the publication of an office's accounts, in a form not to be understood by others than experts, is made compulsory. *If intending insurers would only use their own judgment in the selection of an office, and avoid those whose ratio of administration expenses to premium exceeds 12 per*

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cent, and whose assets are not vouched for by reliable auditors or chartered accountants, they would make their assurance doubly sure. If they neglect simple business precautions, they may obtain no greater commiseration than is accorded to the victims of confidence men or card sharpers. The writer does not intend to insinuate that directors have ever been guilty of anything more heinous than sanctioning, through ignorance, unjustifiable expenditure of policyholders' contributions or funds; but when it is discovered, on investigation, as in the case of the Briton Medical and General, which has recently passed through the Court of Chancery, that instead of its possessing assets of £1,043,408 to meet its discounted contracts, or present liabilities, it possessed £282,154 only, the result, as far as policyholders' interests were concerned, would have been equally the same in respect to the deficiency of £761,254, whether the money had been either stolen or fooled away. This investigation, however, brought out the fact that in the balance sheets the values of the assets were grossly overstated, although the accounts were authenticated by the signatures of its directors; £273,245 more than proved realisable was shown in the assets; £105,775 had, it was found, been embezzled; and £167,470 had been lost by injudicious investments, which had not been written off. So much, therefore, for balance sheets which are not verified by professional accountants, or independent auditors, whose certificates can be relied upon. Hence our previously-expressed warning in this matter to intending assurers. Human nature is the same all through, from top to bottom; no one class monopolises either the virtues or vices which yet seem inherent to all mankind. Certain few of the comfortable classes seem to find relief to their minds in charging their less-favoured brethren with improvidence. As the professional and propertied classes have their own favoured system of insurance, known as the "ordinary" insurance system, so have the artisan and manual labour classes their own distinctive systems, known as industrial insurance offices, burial societies, sick and friendly societies, trade unions, and Government or Post-office Insurance. It will be instructive to summarise matters under the two systems, in order to see where the thrift, according to means, appears greatest.

In summarising the insurances of the professional and propertied classes, it must be pointed out that even the largest landed proprietors are frequently compelled to resort to the facilities which insurance affords them to meet obligations which may be attached to their high positions. The general system of land tenure, or entails, often involves a prudent father in difficulties to secure future provision for the younger branches of his family. The head always possesses a life interest only in his estate or estates, and out of that interest, or annual income, he must provide for others than his direct successor. Life is uncertain, and, naturally, insurance makes the most certain provision. If he encumbers his life interest by a mortgage for such provision, or for other purposes, he must give insurances on his life as collateral security to the mortgagee, hence the landed and aristocratic classes form a considerable percentage of the ordinary assurers in many offices.

Taking the latest official returns, or Blue-book Valuations, it is found on summarising them that the number of insurants, or policyholders, was 808,656, and the total amount of the insurance contracts, including bonus additions thereto from profits, was £413,384,603, or £511 on the average per policy.



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The returns of friendly societies are statistically incomplete, but a summary, given a few years ago, stated that out of 25,234 forms which the Registrar had then sent out, only 12,338, or less than half, were received. These showed a total membership of 4,364,772, and funds in hand £10,226,883; say a further 2,000,000 for membership in those 12,896 societies which had failed up to that date to send in returns.

On December 31, 1886, the Prudential had in force in its Policies.

|                                                                                                                                                           |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Industrial Branch .....                                                                                                                                   | 7,111,828 |
| Estimated number of policies in force in Industrial Companies registered under the Companies Acts, and conducted on similar lines to the Prudential ..... | 2,000,000 |
| Insurance policies in force through Post-office or Government Insurance Department .....                                                                  | 4,861     |
| Members of trade unions, about .....                                                                                                                      | 800,000   |

Total.....16,281,461

of industrial insurances as fairly approximated.

Sweeping charges of improvidence are not borne out, as far as available insurance and friendly society statistics enable the writer to judge. "Wastrels," no doubt, exist in every class, but it would appear that the ratio of provident and improvident people is pretty much alike from top to bottom.

To co-operators, and other like thrifty people, a knowledge of the relative cost of industrial assurance as it is by the weekly payment system, and as it might be by quarterly, half-yearly, or yearly payments, is a matter of interest and importance; therefore, as the writer has now the full schedules and valuation of the Prudential before him, he will analyse the returns for their information.

Taking the industrial table of weekly payments, he finds that at age twenty-five sixpence per week will purchase an insurance payable at death of £42. 18s.; but, should the assured die within six months after effecting the insurance, only one-fourth; or £10. 14s. 6d., would be paid; should he die within twelve months, one-half, or £21. 9s., would be paid. If the death occurred from accident at any time after the date of the policy, the full amount, or £42. 18s., would be paid.

Taking the ordinary table of premiums for non-participating insurances, if £1. 6s. was paid down at once, and every year following, to the Prudential, instead of in instalments of sixpence a week, it would purchase an insurance of £66. 16s. 1d., and the policy would put the holder in immediate benefit; that is to say, if his death took place from any cause whatever (of course, suicide excepted) immediately after the date of the policy, the full amount of £66. 16s. 1d. would be paid. *To put the thing in plain words, people who pay weekly for insurance pay 6s. 5½d. in the £ for the luxury of having someone to wait upon them every week, which could be saved if they paid like folk in a better position—the money down in a lump once every year.* Even after paying so dearly for this luxury of being waited upon, they would have to wait twelve months before being in the same full benefit which the £1. 3s., money down, would at once give them.

Let the matter be looked at in another way. An insurance of £100 is wanted by a member of a co-operative society, whose age is, say, twenty-five. The Co-operative

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Insurance Company will give him a policy for £2. 0s. 4d. a year, paid down in advance; if it is more convenient to pay half-yearly, then it will cost £1. 1s. 3d., paid down in advance every six months; if it is still more convenient to pay quarterly, then it will cost 11s. 3d., paid down in advance every three months. If the premium, or contribution, be paid down for a year in one sum, the office would at once put it earning some interest, and that is why it costs more to insure by smaller instalments, half-yearly and quarterly. If the member with this information before him, and the further information that the store which he deals with may arrange to pay the money for him out of his dividends, still thinks it wise (which is not likely) to continue his insurance, if he has one, on the weekly plan, or take out one with a collecting office like the Prudential for £100, he would, at age twenty-five, have to pay at the rate of 1s. 2d. a week, or £3. 0s. 8d. a year, or 15s. 8d. a year more than if he paid his premium quarterly to what is practically his own special society, or the Co-operative Insurance Company Limited. If the member of the co-operative society wants to insure for as small a sum as £25, the Co-operative Insurance Company will give him a policy for that amount at one-fourth what it would charge for £100, but it would not take a less instalment than 5s.; therefore, if the member wanted to pay by quarterly instalments he would be very unwise in doing so, if, say, the half-yearly premium amounted to 5s. only, or thereabouts.

The writer has been engaged working and studying insurance for twenty-seven years, and he can safely assert, after studying every point of the Co-operative Insurance Company's tables and conditions of insurance, that, without exception, it offers greater advantages on lower terms than can be found anywhere in the insurance world.

The writer thinks it will be a great pity if the operations of the Co-operative Insurance Company are confined too strictly to members of co-operative societies. As compared, however, with the wasteful weekly-payment system, the economy of its methods will prove so beneficial that to obtain them the prudent weekly-wage class should find it advisable to join co-operative societies, and thus procure at one stroke what in practice would be a substantial weekly saving, and a cheap provision for their families.

To fully bring home facts as to the extravagant price which has to be paid for insurance on the weekly-instalment plan, nothing can be more startling than the figures embraced in the last valuation return of the Prudential, viz.:—

In the five years commencing January 1, 1882, and ending December 31, 1886, it collected from the industrial classes the enormous sum of ..... £12,980,664 5 5

Another part of the return shows, on calculation, that the average amount assured per policy was only £9. 7s. 5d., and that the average collection per week per policy was only twopence.

The total administration expenses, for conducting the business during the five years, amounted to no less than ..... 5,212,938 11 9



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The total management or administration expenses were therefore equal to a slight fraction over *eight shillings out of every sovereign obtained for insurance*.

As bringing up a sharp contrast with the industrial business, another part of the valuation returns shows the following as resulting in the "ordinary branch," or for insurances obtained from the professional, property, and trading classes:—

In the five years commencing January 1, 1882, and ending December 31, 1886, the premium collected amounted to ..... £1,293,322 7 5

Another part of the return shows, on calculation, that the average amount assured per policy was £120. 3s. 7d., and the average yearly premium collected was £4. 15s. 8d. per policy.

The total administration expenses, for conducting the business, amounted to ..... 132,359 4 10

The total management or administration expenses were therefore only equal to 2s. 0½d. out of every sovereign paid for assurance.

The business of the Prudential is phenomenal. Five years ago, or, as at the valuation ending December 31, 1881, in the Industrial Branch the

Number of policies in force was ..... 4,822,519

For assurances amounting to ..... £44,558,814

This last valuation, as at December 31, 1886, shows that the

number of policies in force was increased to ..... 7,111,828

For increased assurances amounting to ..... £66,689,111

Increase in number of policies..... 2,289,309

And in assurances ..... £22,130,297

In round figures, the increase in the five years, on both policies and the assurances, may be put down as 50 per cent.

As the business is phenomenal, so are the profits. The original capital originally paid in cash did not exceed £10,000, even if it reached that figure; the additions were made from profits, thus bringing the present cash capital up to £80,028.

The surplus or profit, as ascertained by valuation, in the Ordinary Branch for the five years ending December

31, 1886, was ..... £306,727 2 0

The surplus or profit, as ascertained by valuation, in the Industrial Branch for the five years ending December

31, 1886, was ..... 465,152 0 0

Total surplus or profit ..... £771,879 2 0

It is stated in the valuation return that £720,000 of the above has been divided (£285,000 from the Ordinary Branch and £435,000 from the Industrial Branch).

The amount divided among the policyholders (*profit-participating ones only in the Ordinary Branch*) was £320,400.

The amount therefore divided among shareholders would therefore amount to £399,600, which, on the assumed original cash found by the shareholders (£10,000)

would, as spread over a five years' term, provide dividends equal to 799 per cent per annum. If capital can obtain such an immense reward the Co-operative Insurance Company has not entered the field a moment too soon in the interests of at least such of its own members as may have been paying inordinately high rates for insurance.

It is a patent fact that £285,000 of the Ordinary Branch surplus or profit out of the £306,727 has been absorbed to make up the £720,000 distributed; consequently, as £320,400 has been distributed amongst the "participating" policyholders insured in the Ordinary Branch, the company must have taken the whole of their shareholders' magnificent dividend out of the surplus of the Industrial Branch only, plus £35,400 from the same source, which makes a most munificent gift to a certain section only of policyholders. "How good some people are to poor folk."

All things considered, the Prudential management is the best of the class of weekly collecting offices or societies, owing to its ratio of expenses being lower than many.

It was for the purpose of granting facilities for cheaper and safer insurance than the ordinary collecting burial societies and industrial insurance offices were likely to furnish, which led Mr. Gladstone to introduce his Government scheme of Insurance and Annuities, which has been worked through the same machinery as the Post-office Savings Bank, and was started in 1865.

The scheme, for some unexplainable reason, has not met with the success anticipated by its originator, as, independent of the annuity business, a Parliamentary return shows that between its institution on 17th April, 1865, and the 31st of December, 1884 (a period of nearly 20 years) only 7,362 contracts of insurance were entered into, assuring £575,891. 3s. 3d., which gives an average of £77. 16s. per policy. This average shows that those who take out ordinary industrial policies have held entirely aloof from a well-intentioned scheme which was devised for their benefit.

Members of co-operative societies are now a very large body; their numbers equal, if they do not exceed, the whole body of the professional propertied and trading classes who hold the 808,656 policies, covering £413,384,603 of insurance in 86 offices. Surely this large body of 803,747 members of co-operative societies can, if properly advised and instructed in insurance, make their own special office (the Co-operative Insurance Company Limited) a model industrial office, and a powerful example for good in the land. The economical success of the co-operative movement ought to be a guarantee for good and safe management of the insurance company, as its directors seem to be closely identified with other successful co-operative institutions.

The Post-office authorities, before the institution of Government Insurance under their auspices, assisted their numerous employes in obtaining insurance policies from leading scheduled companies by easy payments, payable or made stoppages out of the various periodical payments of wages or salaries. In the prospectus of the Co-operative Insurance Company, it is suggested that co-operative stores will be induced to enter into some similar arrangement, by making payments on behalf of insurers out of dividends held on their behalf.



## DAIRY FARMING IN SWEDEN.

Unlike the Prudential, which mulets the industrial community to pay large dividends to shareholders, and large bonuses to a section of ordinary policyholders, the Co-operative Insurance Company will make, as set forth in its prospectus, its life policyholders, forming the co-operative industrial community, *exclusive owners of the profits derived from the life insurance branch, which will be divisible among them.*

Much more might be added on the subject of insurance generally, but if the reader of these remarks thirsts for more information, he cannot do better than seek it in the published prospectuses of the Co-operative Insurance Company, or from the store of which he is a member.

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 DAIRY FARMING IN SWEDEN.
 

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FEW countries might so much as Sweden have had a market in England for all their export goods, and not only in former days but also at the present time. For many years, however, it was only the mines and woods of Sweden that were known abroad; and of the former, it was only those producing iron which, from olden times, have been of any importance for the export trade. In the course of years wood took the lead; but although this article still shows the highest figures in the export list, there is no doubt but the chief trade of Sweden is gradually turning into another channel, viz., dairy farming and cattle breeding, the cause of the great development of this trade being the want always felt in England of this article.

Agriculture is justly called the chief industry of Sweden, but during the last decades the farmers have chiefly confined themselves to cattle breeding, which is, in reality, the most profitable business as regards exports, as the farmers are thereby enabled to export their produce in the most improved form, namely, as butter and bacon. While a great quantity of rye, especially from Russia, is yearly imported to Sweden, this country is able every year to increase her export of butter, which has already reached a considerable extent. It is therefore impossible to speak of Swedish agriculture without at the same time mentioning cattle breeding and dairy farming, which, as a natural consequence, must be treated in connection with agriculture, from which it takes its issue.

In most provinces of Sweden landed property is distributed on many hands, and to a great extent on those of peasants. To this is most likely to be attributed the fact of so long a time elapsing before a rational agriculture gained ground. Much is indeed still left to be done, but at the same time it must be acknowledged that small farmers in Sweden, considering the few resources left at their disposal, have to no little extent followed in the footsteps of their betters in the same profession. As a matter of course Scania, the most fertile province of Sweden, was at the head of the

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agricultural reform of this century ; and this province is still a model for the other country whenever the object is to adopt methods by which to turn agriculture from being a mere trade into a great industry.

It is well known that the object of modern agriculture is, by means of the knowledge gained by scientific inquiries and practical experiments, to extort from the earth the greatest possible net proceeds without thereby lessening its yielding power. The object is, indeed, not only to supply the earth with those ingredients which it has lost during the growing of the crop, but also to increase its fertility and at the same time obtain the greatest possible advantage through a proper circulation. This end may be reached in several ways, and by different means according to the different circumstances. In Sweden, as already mentioned, the highly-developed cattle breeding has been the almost exclusive means of improving agriculture. Of the ordinary cereals oats only are exported to any extent worth mentioning. But such estates are numerous where all the products of the earth pass through the cattle pen before assuming the form in which they are either sold or returned to the earth. And many by-trades to agriculture contribute in the same manner to promote dairy farming. Refuse from distilleries and sugar manufactories supplies important material for fodder, especially in the South of Sweden, but it is too often resorted to, to the disadvantage of the butter. And in this part of the country, where the fields are more fertile and the number of pastures less than in the other provinces, special stress has of late been laid on the cultivation of suitable plants for cattle food, chiefly turnips. The different branches of the Swedish agriculture are thus meeting in one object, to support and be supported by the breeding of cattle, whereby not only an easy disposal of the home products of the earth may be obtained, but also, at the same time, by an increased milk supply, means of transforming into a higher money value those quantities of strong food which are now so generally being imported. But nature seems also to have especially favoured this country so as to enable her to bring forth dairy products. In the middle and northern part of the country extensive pasture grounds yield a cheap fodder for young cattle as well as milch cows. The cold climate of the country, and the abundant supply of water in the shape of rivers, lakes, and brooks, open an easy and cheap access to that article which is of the greatest importance for the production of good butter, namely, ice. It may indeed be said that ice is the real founder of the Swedish dairy business on a large scale.

Scandinavia has the merit of being the first country in which dairy farming was put in system, and thence originate the most valuable inventions now in use. A Swede, Mr. J. G. Schwartz, was the first to employ the method, now bearing his name, of surrounding the milk pans with ice, thereby hastening the creaming of the milk. By bringing down the temperature of the milk in a few hours to one or two degrees above zero the fatty substance of the milk rose to the surface much quicker and more completely than by the former process. As this method rendered it possible to use deep and narrow vessels, the space occupied by the pans was considerably reduced, and much larger quantities of milk could now be dealt with at the time.

Another advantage obtained by the strong refrigeration was that the cream and the skim-milk gained much richness, and especially that the quality of the butter was greatly improved. All over Scandinavia, as well as in America, this method was



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soon generally adopted, and before long it became the dominant one in Sweden. At the same time the Scandinavian butter gained a large market in England, where it was soon acknowledged to be without equal as regards freshness and flavour. Tempted by the high price of the time, farmers went on producing milk, and many of those products of the earth which had hitherto been sold, were now used as feeding stuff for cattle. In the southern provinces of the country, where ice is not to be had so easily on the spot, but must be imported from the north, dairy farming soon got a powerful ally in the milk separator invented ten years ago.

The idea of quickly separating the lighter cream from the other part of the milk by means of the centrifugal force is an old one, but it was first practically realised in Scandinavia by De Laval by the above-mentioned separator, and in Denmark by Messrs. Burmeister and Wain, who constructed a centrifuge now bearing their name.

In both machines there is a continual circulation of milk, and in both the fatty substance is separated from the skim-milk so entirely as to leave only 15 per cent of the latter. Dairy owners familiar with both appliances may be in doubt as to which to give the preference. The Danish centrifuge is larger, and the cost of working it perhaps somewhat lighter; but on the other hand it must be admitted that the Swedish machine is far more easily managed, and may consequently be left in charge of less-experienced people. The speed with which the milk circulates in the latter machine amounts to from 6,500 to 7,000 revolutions per minute. Naturally enough the Swedish separator is mostly used in Sweden, the Danish centrifuge in Denmark; in foreign countries the Swedish separator seems to have gained most confidence.

The advantage of the separator is obvious in such places where ice is either scarce or expensive. But also in places where ice is plentiful and cheap, the separator is of great use, as the cream is thoroughly separated from the milk by this process, even if carried long distances, whereas milk that has been much shaken will only with great difficulty deposit the cream by the method introduced by Mr. Schwartz. Also as regards economy the separator is of great importance, at least in working large quantities of milk, as the process of creaming requires much more time and space by the old method with ice.

The quantity of milk separated is independent of the price of the separator. So, if there be a large quantity of milk, the cost of every gallon will be far less than if the ice method be used, by which the cost of every gallon is almost alike whether the quantity of milk be large or small. The separator is, therefore, always to be recommended to large dairies, but not so much to small ones having a large stock of ice, and not too great a distance from which to carry the milk. At such dairies the expenses of working the separator would not be balanced by the profit; and this would so much more be the case owing to the fact of only butter, and no sweet-milk cheese, being lately exported from Sweden, thus leaving great quantities of skim-milk for which there is hardly any use. By using the separator, butter of a trifling more value may, indeed, be made from the milk; but, in return, it would leave skim-milk of a more indifferent quality, and the cheese made of this milk would be still more difficult to dispose of. In many provinces in the north Schwartz's method is, therefore, and with good reason, still preferred; and it is evident that the heavier the fall is in the price of butter, the less profitable can it be to deprive the milk of

the last 10 per cent of cream, which is done by the separator, but which the ice method still leaves in the milk. As regards the quality of the butter, neither method is considered to give a different result from the other.

In Sweden there is a difference between estate dairies and such dairies as are supplied with milk from several farms. The difference between these two kinds of dairies is, however, not very great. No doubt the owners of many estates supply their dairies exclusively with milk from their own stock of cattle; but many others, finding that they can work much more milk at a slightly additional expense, often buy milk from their neighbours and mix it with their own. On the other hand, many owners of large estates let their dairies, in which case it almost invariably happens that the tenant buys milk from other estates too; and this is done still more by the ordinary farmers, who do not spend so much in working their dairies. Accordingly, those dairies do not differ so much from another kind of dairies sprung up all over the country during the last ten years with the special purpose of buying milk from small purveyors. In those parts of the country where milk is plentiful—for instance, Scania—such dairies are situated close to each other, and often in the vicinity of the large estates. They are generally worked by private individuals, who personally manage them, and often buy milk from some small estate where it is not found profitable to keep a dairy. In the northern provinces, on the other hand, the milk producers often form companies, and establish joint-stock dairies, so as to be sure to have a place to which they can send their milk. They either let these dairies, or manage them on their own account by the assistance of a practical dairyman. Formerly it was the custom of those dairies to pay one price for the whole year, or one for the winter and one for the summer. But when the butter price became variable and fluctuating, a change took place in the fixing of the price for the dairies, which was now regulated according to the average monthly price of butter, and in Sweden and Norway it became gradually the custom to go by the Copenhagen quotations.

In most dairies the separator is only working once a day, namely, in the morning. The evening milk is poured into pans sunk in cold water, and left so over-night. In the morning as much milk is skimmed off as may be done by hand, and the remainder of the milk is poured into a large pan, from which it runs to the separator. In order to have done with the evening milk when the morning milk arrives, it is necessary to set to work very early in the morning, or at about four or five o'clock. If the milk is to skim clean in the separator it must hold a temperature of about thirty degrees centigrade, for which purpose the pans in which the milk is poured are supplied with double bottoms, between which steam is introduced to warm the milk. In a similar manner it is necessary to warm the morning milk, especially in winter, and if it has been carried a long way, or if the separation take a long time. If the milk be thus sufficiently warmed and the current of milk to the separator is not too great, besides the separator going at the proper speed, it will be possible by those means to obtain the greatest quantity by only taking 15 per cent of cream from the milk; but for divers reasons there are often taken from 18 to 20, and even 25 per cent of cream. This makes also very little difference, as the skim-milk is generally not worth more than the buttermilk.



At the same time as the evening milk is being separated the churning begins, for which the cream separated on the previous morning is generally used. Just before the separation the cream is put in ice water and cooled down to four or five degrees centigrade, as occasion may require. Presently it is again warmed to a temperature which will make the milk fit for souring; but this temperature varies very much according to the quality of the fodder, the arrangement of the localities, and the weather. The cream is then poured into wooden casks generally made of beech, and the acid being mixed with it, it is left so till the following day. It may almost be considered as an established fact that the quality of the butter depends upon the souring. If the butter be in any way inferior, the cause in nine cases out of ten is to be found in the souring. By their knowledge of this particular line, a dairy man or woman may prove their capacity, which is not gained without much practice and experience. And not only the quality of the butter is greatly influenced by the souring—the quantity also much depends upon it; so it is evident that it is very important to have a skilful and conscientious person to sour the butter. In Sweden it has therefore become usual to pay a large part of the wages of the dairy men and women by allowing them a certain percentage on the butter—a proceeding to which the butter merchants have never objected. A process far more simple than the souring is the churning, during the latter part of which a little water is poured into the churn. The churning being over, the butter is again washed with a little water, and the buttermilk pressed out of it by force of hand. Lumps, from three to five pounds of butter, are generally worked at the time; and when they are done the butter is salted by mixing the salt into it by hand. The butter is now left some time in ice before working it again, this time by means of a kneading machine, until it is considered sufficiently free from brine. Directly afterwards the butter is packed in casks. The ready-made butter generally contains from 83 to 86 per cent of fatty substance. In some dairies, however, the butter is not soured, but this is nearly always the case with butter intended for the English market. In many dairies where a separator is used, cheese is afterwards made of the skim-milk, which is then generally mixed with a little buttermilk. But this cheese is only sold in Sweden, chiefly in Nordland. On the other hand there has been found a profitable market in England for cheese made of separated skim-milk and prepared according to the American system, but without any heterogeneous fatty substance added to the milk. But no attempts to make a savoury cheese of a mixture of milk have been successful in Sweden, although often tried; and this method has now to a great extent lost its importance, owing of late to the fall in the price of butter, which is approaching the price of best lard. Consequently sweet-milk cheese has also become cheaper, and the public are now more willing to pay the difference in the price between this kind of cheese and the American cheese, rather than eat the latter greasy stuff. At the same time skim-milk cheese, made of separated milk, is sold at so low a rate as 8 öre per pound (or about 1d.), and many dairy farmers have therefore given up making it, and prefer feeding their swine with the skim-milk and buttermilk. This by-trade to the dairy farming has been much improved, especially in the south part of Sweden, where it occupies a very prominent position, owing to the swine from this province having found a market with the Danish butchers. Butcheries in the English fashion

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have, however, now been established both in Malmoe and Gothenburg, and several are in course of erection. Skim-milk, mixed with linseed and crushed corn, is also much used for feeding and fattening calves, but generally only at estate dairies where calves are kept in greater numbers, whereas farmers who exclusively attend to dairy business make skim-milk cheese or feed swine. Numerous experiments have also been made in feeding cows with skim-milk. Some cows eat it without objection, and the fear of their milk becoming less rich by this mode of feeding has turned out to be unfounded. Other cows, however, show a marked aversion to this food; but, on the whole, this matter has not yet been sufficiently tested to form any conclusion as to its advantage or practicability.

It is almost exclusively in estate dairies that sweet-milk cheese is made, and many of them of an excellent quality; but as the export of this article is of no importance, it is not likely to elicit any interest in foreign countries, all the more as these countries are in no way less advanced than Scandinavia in this particular branch of dairy business.

Hitherto we have spoken of dairies in general. Those in the towns, however, differ in many respects from those in the country, being, as a rule, always connected with the sale of milk. Butter-making is generally only a by-trade to this kind of business. As the cost price of milk is rather higher in the neighbourhood of large towns than elsewhere, it is the sale of milk that must cover the difference. Town dairies accordingly buy their milk unskimmed, as well as skimmed. The latter is conducted from the separator over a refrigerator, and in South Sweden as well as in Denmark they have even begun to apply pasteurization in order better to preserve the milk. An apparatus has been constructed in which the milk is heated to seventy degrees by means of waste steam from the engine, while the apparatus itself revolves at a very high speed. The milk is subsequently conducted direct to the refrigerator; and if this be sufficiently large, and the water employed for the purpose cold enough, the temperature of the milk will be reduced in a quarter of a minute to one degree centigrade without deteriorating the flavour of the milk. By this method the milk will keep for a very long time, as the infusoria living in it and causing its turning sour are destroyed. Now it is also used for preserving sweet milk and cream, and it is thought possible by this method to reduce the danger of infection by cows suffering from pleuro-pneumonia or other contagious diseases.

Of late, a great many inventions have been made in Sweden in the line of dairy-farming. Among others, the inventor of the separator, Dr. de Laval, has constructed a special turbine separator, consisting of a small turbine under the cylinder through which the milk is to pass. This turbine is turned by steam at a speed of 7,000 revolutions per minute, at the same time carrying along with it the above-mentioned cylinder. As a similar turbine is constructed to drive a churn, it is now possible to work a steam dairy without an engine, the object being to reduce the cost of establishing a dairy, and also that of belts, straps, &c. These turbines, however, consume such great quantities of fuel that they are only to be recommended in places where fuel is cheap. Another of De Laval's inventions seems to be of much greater importance, namely, the hand separator, of which there are two constructions skimming about fifty gallons per hour. This separator is most convenient to small



purveyors who wish to sell their cream and make use of the skim-milk on their own account. There are dairies in Sweden which receive the cream for churning from such purveyors, who have themselves iced and skimmed their milk. In such dairies, the milk delivered by every purveyor is churned separately, and accordingly, churns of all sizes are used, the price paid for the cream being in proportion to the quality and quantity of the butter obtained. But in order to get a better result, it would no doubt be desirable that the dairy-owners should be able to act more freely with regard to the cream they receive; and should the use of the hand-separator become more general, there is no doubt that instead of calculating the price of the cream according to the result of every separate churning, the price will be regulated by an examination of the quantity of fatty substance of the cream. De Laval has also constructed an apparatus for such examination called the Lactocrite. Formerly, people were almost entirely confined to the use of an apparatus the working of which was not dear, and indeed perfectly reliable, the purchase price, however, being rather high. The Lactocrite somewhat resembles the milk-cylinder of the separator—it is revolved together with the separator, and also by hand. The object is by centrifugal force to separate the pure fatty substance from the other milk. Twelve samples are put in receptacles in the cylinder and centrifuged together. An apparatus of a similar kind is constructed by Mr. Fjord, of Copenhagen, to whom much credit is due for all he has done for the Danish dairy-farming. By means of this apparatus it is possible to examine seventy-two samples of milk at the same time. It is not, perhaps, so accurate as the Lactocrite, as it only gives the amount of cream, not of fatty substance; but so much is certain, that a much more correct idea of the quality of the milk is obtained by ascertaining the quantity of cream by centrifuging than by examining it in so-called proof glasses. Anyhow, this apparatus is of great importance for the purpose of examining the quality of the milk of different cows in a large cowhouse, for it is the quickest as well as the cheapest way of doing it.

Both those apparatuses have indeed proved to be of great value in Sweden, where the importance of paying a strict attention to the different kinds of milk has gradually become more evident. As long as the dairies paid a certain price for the milk, whether this be a fixed one or regulated by the fluctuations of the market, their principal object would only be to obtain as much milk as possible without any regard to its quality. It is evident that the breeding of bull calves as well as of heifer calves of such cows as gave most milk, without any attention being paid to the quantity of butter obtained, would result in a stock of cattle the milk of which would gradually become less rich. In the course of time it was proved how unprofitable this practice was to the dairy farmers, as also to those milk producers who supplied the best milk. The downward tendency in the price of butter, which has of late been steadily increasing, has also convinced dairy farmers, even on such estates where the owner himself has been working to improve his milk, that it was necessary to establish dairy farming on sounder principles than hitherto. Farmers are beginning to understand that they must breed cows, with as little cost as possible, to give the best returns of butter and not of milk only. It has also been observed that all modes of feeding are not profitable because they give a good return of milk. It is to be hoped that farmers in breeding calves will in future attach more importance to the capacity of the cow as a butter

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producing animal, and in order to do so, it will be necessary that they should have at their disposal cheap, quick, and reliable methods for examining the fatty substance of the milk. But in order to make it profitable for the milk producers to produce a better and richer kind of milk, it will be necessary that the dairy owners should agree to pay a higher price for their milk according to the quantity of fatty substance contained therein. As this often varies so much as to make a difference in the real value of the milk from 4 to 5 öre per gallon, it seems to be both fair and judicious to calculate the price accordingly. This mode of payment has already been introduced into many parts of Sweden; and in such places where it has not yet become customary, dairy owners are getting very particular in examining the milk so as to protect themselves against inferior stuff. Farmers are therefore beginning to calculate their milk prices not according to the quantity of the milk but according to the quality of the cow. In short, dairy farming in Sweden may indeed be said to have come to a turning point, as farmers are getting more able to discern not only how the cowhouses are to be constructed so as to give the best return, but also how the milk is afterwards to be sold, and that neither object shall interfere with the interest of the other.

The bad times and the low butter prices have thus at least had the effect of making farmers look out for a good and safe mode of calculating the value of their products, an undertaking which was formerly very difficult by the want of a proper apparatus for examining the milk. It will be easily understood how necessary and important it is to pay the strictest attention both to the detail as to the purpose of the Swedish dairy farming, an industry which is in such great development and on which already so much exertion has been expended. The development of the Swedish dairy farming appears clearly by the following table, showing the export and import of butter during the last ten years:—

|            | Import.   |    | Export.    |    | Surplus.  |
|------------|-----------|----|------------|----|-----------|
| 1877 ..... | 2,524,380 | .. | 3,720,182  | .. | 1,195,802 |
| 1878 ..... | 1,710,139 | .. | 3,819,809  | .. | 2,109,670 |
| 1879 ..... | 2,263,551 | .. | 4,644,763  | .. | 2,381,212 |
| 1880 ..... | 3,404,646 | .. | 5,261,718  | .. | 1,857,072 |
| 1881 ..... | 2,203,895 | .. | 5,106,684  | .. | 2,902,789 |
| 1882 ..... | 2,380,788 | .. | 5,822,601  | .. | 3,441,813 |
| 1883 ..... | 2,612,000 | .. | 8,187,000  | .. | 5,575,000 |
| 1884 ..... | 3,240,467 | .. | 9,562,470  | .. | 6,322,003 |
| 1885 ..... | 2,844,599 | .. | 11,446,189 | .. | 8,601,590 |
| 1886 ..... | ....      | .. | ....       | .. | ....      |

It must, however, be observed that a great deal of this butter is sold to Danish export houses, which afterwards export it to England as Danish butter. This is the cause of the Danish butter being better known in the English market than the Swedish, although the Danes themselves admit that the Swedish butter as regards quality is in no way inferior to their own.

Great exertions are now being made in Sweden to develop the study of dairy farming. A number of dairy schools have been opened, two of these being of a higher class, and teaching dairy farming practically as well as scientifically. In all districts dairy councillors are appointed to give advice and information to those less



experienced in dairy farming. Special exhibitions, held in various districts, offer the producers an opportunity of comparing their produce and exchanging opinions. At the Agricultural Exhibition in Stockholm, last year, it was also evident that dairy farming was not wanting animation. Three dairies were working De Laval's and Burmeister's separators, besides one made by another manufacturer. De Laval's hand separator and lactocrite were for the first time exhibited, and the milk of all the exhibited cows was examined by the latter. The general opinion of the farmers in this country is that improved cattle feeding is the best and surest means of securing high prices for their produce, and they are, therefore, likewise indebted to the natural resources offered by their native country as to the inventions made by their own countrymen.

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## CO-OPERATION *VERSUS* SOCIALISM.

BY PATRICK GEDDES.

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### CHAPTER I.

#### CO-OPERATOR AND SOCIALIST *VERSUS* CAPITALIST.

IN those halcyon days of orthodox political economy which are now so rapidly receding into the distance, the wide theoretic and practical differences between the co-operator and the socialist were wont to matter nothing to the public, and little even to themselves. For the co-operators were then but comparatively small and scattered associations, living as unheeded by and as inoperative upon the great mass of the public as the congregations of any of the minor sects; while the socialist was at best only a solitary wandering preacher to whom few listened, and whom yet fewer regarded. Much more commonly, indeed, he was simply a stuffed bogey, dressed up in the shadowy garments of some worn-out French theory, if not some gross caricature even of that, and set up to be gravely knocked over for the thousandth time in leading articles, addresses from the hustings, and other accepted substitutes for political and economic thought. In the vast crowded hive of industry co-operation and socialism had little room or chance to meet at all, still less possibility of coming to any understanding, least of all of gaining the attention of the public. For the great world had other matters in its mind, and knew far better than listen to any of these schemes for dethroning *laissez-faire*, and depriving us of the benefits of an unrestricted struggle for existence; it had to be "getting on." With railways to make everywhere, coal and iron fields to develop, and machinery to be improved until "human labour should be superseded altogether," or at any rate (what has certainly turned out to be much more nearly realisable), until we had everywhere substituted "ordinary labourers for skilled artisans,"\* there was evidently little time

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\* Ure's *Philosophy of Manufactures*. 1835. Chapter I.

or use for merely social re-arrangements. For if (as our fathers certainly believed, and that with a uniformity of faith which has no historic parallel since the thirteenth century) universal wealth, happiness, and leisure, were all to be obtained through the mechanical increase of our total production under a régime of unrestricted individual competition for its products, nothing could seem clearer than that schemes turning people's attention primarily to better average distribution were not merely chimerical, but pernicious heresies, calculated to retard the very progress they were meant to aid. Even in their mildest forms, they could not be other than "unsettling," as the orthodox phrase always goes; they diverted people's minds from the contemplation of all the marvels of modern progress, the cheap loaf, the spinning-jenny, the express train, the gas lamps, the tall chimney, and the telegraph poles—in fact from every established object of the national worship, even if they did not find fault with the all-sufficiency of these; worse than that, they agreed in seeking to do away with "the legitimate rule of capitalists—that of the head over the inferior members."\* And hence, especially when we remember that this open revolt against the established temporal order, or kingdom of the capitalists, implied an equal, if tacit, revolt against the established doctrinal order, or church of the editors—and that, too, with the more serious consequence of stubbornly withholding the daily pence solicited by the one, if it could not recover those retained by the legitimate rule of the other—it is little wonder; then, that co-operator and socialist were alike long steadily preached at and sneered down or pushed aside.

Yet, in the varied history of human thought, few changes have been more silent, rapid, and thorough than that which has been in increasing progress during the past dozen or eighteen years. There is little external change indeed: the "legitimate rule," however undermined, is still practically unshaken; the leading articles of the *Daily Telegraph* or the *Scotsman* on six days of the week betray as little consciousness of the graver facts of intellectual and social movement around them as do the more reverend monotonies to which they give place on the seventh; yet, though unmarked by any Darwin, an intellectual revolution has been in progress, and men see no longer as they were wont to do. It is now Lord Sherbrooke's turn to stand, as Mr. Ruskin did twenty years ago, friendless, as perhaps only an unpopular economist can be; Lord Bramwell and Lord Wemyss are as a pelican in the wilderness, and as an owl in the desert; the sale of Mr. Smiles's inspiring biographies of successful men is not what it once was; on every side we see the panaceas of extending markets, increased production, and individual struggle are being quietly dropped; their exponents are fast disappearing, and the listeners have already dispersed. And it is around the formerly despised co-operator and socialist that the new crowds are gathering; the once unnoticed co-operative society is now numbering a notable percentage of the population—nay, here and there commencing to reckon a majority of them—while the socialist orator is beginning to sway vast masses, to lay long trains of contagious influence, and so is coming on all hands to be recognised as a considerably larger and more impressive figure than the petty puppet who used to be exhibited in his room. Amid the confused babel of economic

\* Ure; Op. Cit. Book III., chapter I.



dispute and anarchy we hear these two voices loudest, and see these two leaders gathering the largest legions. Strangely-contrasted types they are, yet common and everlasting ones, for it is these two types of men that for ever rule and sway their fellows. The one is a passionate preacher, glowing with the enthusiasm of youth, or sometimes the whiter fires of age; his mind filled with the contrast between the sordid facts of everyday life and the luminous glories of the ideal. That contrast for ever surrounds the path and stimulates the progress of mankind, it has impelled alike all great religious and social changes; and though at this way of looking at life every man sneers until his own eyes are some day struck open to it, yet thereafter he has no rest until, like Christian of old, he sets out upon a life-long pilgrimage. Yet men feel this in varying measure, and express it in yet more different ways of word and deed. Leaving, then, the preacher, we find the other a plainer-spoken man; a solid and substantial beef-fed citizen, cool, practical, and prosperous, with a well-stocked house, a comfortable family, and money in the bank; well satisfied, indeed, with such escape as he has effected from the "legitimate rule," yet no less so with having wrought out his economic emancipation as strictly within the existing rules of social order as his political enfranchisement itself. But for a deep-seated tincture of youthful enthusiasm to leaven his daily labours, he agrees substantially in character and essential view of life with the older types of business men around him; for, despite the invaluable step involved in his recognition, beside personal, of co-operative interests, it cannot be said that this has as yet been associated in theory with any other extensive departure from the traditional economics, or in practice with any very distinct recognition of the community lying outside or below the pale of partnership. Viewed from the standpoint of economic history, it may be doubted, therefore, whether the mass of co-operators of the past generation can be interpreted as much other than the personal analogues of those more active members of the working class who were previously wont to become individual capitalists, and whether the fact of their association must not be ascribed in good part to the positions of individual capitalists being for the most part already filled up, as well as to the existence of that larger degree of social feeling generated by a few enthusiastic leaders. Nor will the historic parallel break down when we compare the progress of the co-operative movement in general with that of the best individual capitalists, who have risen from the humblest to the greatest tasks. For in both cases this history does not merely or even mainly lie in the enlargement of business, in the multiplication of branches, or in the improvement of the balance sheet, fundamental though these may be, but far rather in the range and social bearing of the tasks performed. A simple shopkeeper like Whiteley or Shoolbred may have great capital, yet he has in no case yet become, so far as social, political, or economic influence is concerned, what we all understand by a great capitalist. That comes precisely in proportion as he rises from small affairs to greater, from retail through wholesale trade to some form of production and organisation of labour; next from this as a speciality to the wielding of capital in general; and finally to the wise, masterly, and public-spirited application of it to meet higher and higher wants of social life; to helping to lead and direct the channels of all other capital as well as his own, thus at length becoming in the most literal sense a captain of industry. It is no disrespect to any lawful calling to say that all

occupations are thus capable of being ranked in very definite degrees upon this economic scale, nor will it seriously be disputed that from that simplest of all existing callings, the retail supply of the everyday necessities of alimentary life, up to those two most complex ones which are concerned (1) with the widest co-ordination and direction of industry in general, and (2) with the supply of higher than industrial necessities, a rapidly-increasing range of personality, both in intellect and in morals, has to be developed and brought into play exactly as the web of relations thickens and widens. And so precisely with the co-operative movement itself; for although it has been the vice of contemporary historians in general to confuse mere increase in quantity of wealth and number of population with the true progress which depends on rising quality of these alone, the true interpretation is peculiarly obvious in the case before us. The real rise and strength of co-operation as a social movement is being daily more and more clearly felt to lie not in the mere extension of retail or even wholesale business, indispensable though these are in bringing an ever-widening circle of the community within its field of influence, but far rather in solving those harder problems which lie beyond the exchange and distribution of commodities altogether. And while in the simpler and preliminary fields of action the co-operative movement is now entitled to claim the fullest public recognition and acceptance, those are its best friends who lay most stress upon the fact that its higher and more arduous tasks are only now-a-days being begun. In one sense, indeed, the co-operative movement is an old and strong one, but in another comparatively young and weak; on one plane its numbers are reckoned by hundreds of thousands, on another perhaps almost in tens or even units. Yet it is from the latter aspect almost exclusively that the student of contemporary economics is compelled to regard it; and this question is now being more and more widely and anxiously asked in so many words in all countries every day—"Seeing that the great manufactures and crowded cities of Britain render her the most probable theatre of the next social changes, will her vast co-operative movement be equal to meet the problems rising before it, and which it has boasted itself able to solve? Or is it, despite the admirable ideals and the solid beginnings of a few unaided leaders, destined to settle down into a mere statistician's paradise of cheap food and large dividends until the socialists have irretrievably taken the wind out of its sails?"

Hence, then, the importance of the present juncture in co-operation. All these external critics, whether of capitalistic or socialistic bias, are interested in watching the strife of these two opposing tendencies, which are at present so constantly apparent. Of this no better example can be quoted than Mr. Gray's recent enumeration\* of the different types of so-called co-operative productive societies, which he

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\*J. C. Gray on "Co-operative Production." Plymouth Congress, 1886.

"LACK OF UNITY IN PRESENT ATTEMPTS AT ADJUSTMENT."

But, powerful as we can be in this direction, we have hitherto failed in making any great headway, owing entirely to the fact that our opinions vary so much. When we ask "What is meant by 'co-operative production?'" it much depends to whom the question is put as to what the reply will be. In running over the list of what are called productive societies, we find classed together societies whose constitutions are as dissimilar as it is possible to be. We have—



shows us to be a thoroughly confusing title, since it covers "societies whose constitution is as dissimilar as it is possible to be," ranging from undertakings which are substantially socialistic in everything but the name on the one hand, to what are substantially ordinary joint-stock companies, that is to say, capitalistic in everything but the name, upon the other. No man can serve two masters; no opposing sets of social forces can indefinitely remain in equilibrium, and the dilemma of co-operation must soon be finally settled upon one line or the other. On the one hand, then, the movement is destined to remain substantially holding "the balances between capital and labour exactly as under the old system, with this exception, that increased scope is allowed to a greater number of small capitalists," on the other it must throw its main weight and powers into the problem of practically organising the new order of things, or at anyrate a transitional order. From this it is little wonder that not only the timid, but the cautious shrink; there is no use in ignoring that no change of any kind, be it natural, personal, or social, is ever made in this world without at anyrate some initial loss, inconvenience, or sacrifice. The inventor sinks his time and toil and capital to a certainty, while the return is uncertain enough; and the losses and failures incurred in the many attempts to establish co-operative production in any form at all are a sufficient omen that such a bold policy is not the one best calculated to secure immediate large dividends.

Yet if, as probably a plébiscite of co-operators would at present decide to do, we seek first our dividends, and so steer cautiously away from Scylla, we shall simply be making straight for Charybdis. The conventional aspect of co-operative progress no doubt is that each year's rising percentage of co-operators among the general community, and of business amid the national turnover, has only to continue for a certain (calculable and very moderate) time to ensure a complete victory; yet this rosy view does not resist a moment's examination. It was easy—nay, inevitable—for co-operative distribution to succeed amid the existing shopkeepers, certainly the weakest, most apathetic, economically the most ignorant and in all respects least united body of men in the entire community; it has had no serious resistance to encounter save the universal one of popular inertia, and this it could promptly meet by a liberal discount to purchasers. But the establishment of co-operative production has been far harder, not only because of the intrinsic difficulties of the problem itself, but because the manufacturers are individually and collectively an incomparably stronger, more energetic, more resolute and resourceful, as well as more united, body of men than are shopkeepers, and therefore, of course, proportionally

1. Societies working on a system similar to the joint-stock companies, being owned by society and individual capitalists, and dividing all the profits on capital.
2. Societies on the federal principle, carried on by societies as collective capitalists, and dividing all profits between capital and purchasers.
3. Societies, such as corn mills, &c., working under a mixed proprietorship of societies and individuals, paying a fixed interest to capital, and dividing all profits amongst their customers.
4. Societies having a mixed proprietorship of societies, individuals, and workers, dividing profits between capital, purchase, and labour.
5. Societies carried on by workers only, sometimes with borrowed capital, paying a fixed interest on the capital, and dividing the remainder of the profits on labour only."

harder to compete with. The rough test of average income would itself be sufficient evidence of this, even did not everyone's personal experience suffice. And still more must these difficulties multiply as the co-operative movement widens, and rises into competition with the great capitalists proper; and without this, of course, its problem is only begun. By all means let co-operative banking take such roots as it can in the thinner soils as yet unoccupied or unshadowed by the existing banking system, but let it at least seriously lay its plans and count the cost before opening its campaign against the gigantic material resources of modern finance, and the proportionally-developed intelligence and skill which guide these. Let the co-operator try, by all means—in fact, he must try, for till he has succeeded his emancipation is only beginning; but let him not reckon on too easy a victory. It is easy—a mere question of time—for each body of co-operators to demolish the local shopkeepers in detail: victory is as certain as if the struggle were a simply physical one; yet, however inspirited we are by this, it must be admitted to be decidedly less easy to try conclusions, whether competitive or physical, with factory after factory, while finally it becomes proportionally no easier to try conclusions with Rothschild and his fellows than against Von Moltke and his staff, even if the one in ultimate appeal did not set agoing the other. There would be some grounds certainly, even here, to hope for ultimate victory—hardly, however, for any more continuance of large dividends than on the former apparently more adventurous course of avowed social experiment, since the initial capital would soon be pretty deeply sunk in paying for lessons in the art of war; in fact, we have to recognise that the great capitalist has long been saying, with the most insulting frankness, “By all means, my working friends, supersede your grocer as fast as you can (that makes your wages go so much further that you never think of asking me to lower my profits to raise them); make your own shoes, too, if you like, and grind your own cocoa for breakfast; but you don't seriously imagine that you are getting rid of me yet, do you? Just try it.”

Of course we shall try it: the question is simply in which way; and this “extension of business” one is not so very easy and profitable as to some it promises—in fact, exactly like the former apparently more idealistic way, it leads only to certain sacrifice and problematical victory. Whether we are to make tentatives towards the new social order in its completeness, or fight the capitalists on their own ground, is, then, almost equally adventurous. And the conclusion certainly seems to be that, while in some respects no doubt the movement is at present committed to both lines of advance, there is certainly ground for the discreet (that is, valorous) outlay of capital in constructive effort towards a higher and better social order than the present one.

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## CHAPTER II.

## ECONOMIC THEORY PAST AND PRESENT.

**B**UT the unification of co-operative policy can never fully be accomplished in the present confused state of economic theory. The more strongly capitalistic or joint-stock types of co-operative associations are of course substantially living in the old-fashioned orthodox or individualistic economics, with little alteration save in reading a large firm of small capitalists where the writers were thinking of a small firm of large ones. Others again are gravitating fast towards what is substantially socialism; others again make all sorts of attempts at compromise and mixture of the two; it behoves us therefore to look both schools as fairly in the face as we may. The old school had a certain logical coherence, and of this the socialists have made the fullest use: what Marx most prided himself upon, indeed, was having turned Ricardo inside out as one would a stocking, yet without breaking a single thread. Even the passionate wrath of the socialistic school against the established order is, it is fair to remember, only the obverse of that unctuous complacency which, if not official lying, at least rendered any of that quite unnecessary, in such once authoritative writings as Dr. Ure's classical "Philosophy of Manufactures" above quoted. Ingenious attempts at patching new cloth upon the old garments have been made by Mr. Jevons, Mr. Sidgwick, and Mr. Marshall, yet their books possess only a transitional usefulness and interest. The essential futility of such attempts has been well pointed out in the only English work which as yet gives any adequate view of the movement of economic theory, Dr. Ingram's article "Political Economy" of the *Encyclopædia Britannica*,\* and the writer has elsewhere repeatedly attempted to emphasise the same defects. Were it not devoting undue space to a merely detractive criticism, it would be easy to show, say with reference to the formerly standard treatise of John Stuart Mill, upon which the subsequent attempts at compromise are of course mainly based—the essentially unscientific character of the whole matter and manner alike. One might show how the whole style of thinking is that of a schoolman of the middle ages, and accurately opposed to that of a modern scientific thinker; how the arguments are constructed on the principle of first inventing some purely abstract conceptions like supply and demand, metaphysical entities like utility, and so on, and then drawing deductions from them, inconsistently even at that; *e.g.*, on one page rebuking the ignorance of people who believe in the intrinsic nature of wealth, after having shortly before described utility as "fixed and embodied in permanent objects." And when we leave the disinterestment of every essential form of mediaevalism, so far as the manner of treatment is concerned, for an examination of the matter, we find this in substantially no fresher state; for the frank ignorance of every one of the sciences is precisely that characteristic to which the "dark ages" owe their name. The special merit of the

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\* Soon, it is to be hoped, to be published in a separate and more accessible form.

Physiocratic school, which founded political economy, lay in their vague perception of the close relation of their science to that of external nature; the founder of scientific sociology more than a generation ago made clear the relation of social science to the preliminary ones, and his argument has been ably reinforced and popularised by Spencer; yet of all this not only Mill, but his more recent exponents take not the very slightest note. Thus in the *Scotsman* review of Dr. Ingram's article, only two years ago, great exception was taken to the passage—"Economic investigation has hitherto fallen for the most part into the hands of lawyers and men of letters, not into those of a genuinely scientific class. Nor have its cultivators in general had that sound preparation in the sciences of inorganic and vital nature which is necessary, whether as supplying bases of doctrine, or as furnishing lessons of method. Their education has usually been of a metaphysical kind." To this very modest statement of fact the astonished reviewer—"The writer apparently means that in some way the sciences of inorganic and vital nature are to be used as the groundwork of political economy. . . . What we should like to know is the conceivable bearing of the natural sciences upon any economic problem."

The reply is simple enough. Even if the reviewer is unacquainted with the classical demonstrations of the dependence of social upon physical and biological science above alluded to, and is contented to continue the study of production without reference to the quantity and quality of material things, is he seriously prepared to study the "laws of population" without reference to the rate of reproduction of living beings; the doctrine of "competition" without reference to the struggle for existence; or the doctrine of "progress" without knowing whether or not it is in the line of evolution?

Passing next from criticism to construction, and granting that our new political economy must be inductive instead of deductive, must be based on the concrete facts and ascertained laws of nature and life instead of upon mere metaphysics, where are we to find this? Certainly not among the socialists, for, as we have seen, such economic theory as they accept is avowedly only a restatement of the orthodox one, of course worked backwards, and consequently liable to all the criticisms which we have been urging against this. We are thus thrown back with Comte, Spencer, and Ingram, upon those natural sciences which the conventional economists have so constantly ignored, and which the reviewer above quoted so loftily despises. Such a conception as that "wealth," if it be real at all, must consist of matter and energy in some form; and consequently that "saving," if it be real at all, must lie in conserving some definite portion of this (not simply in acquiring general powers of taxation over the future results of other people's labour), is of course perfectly obvious when we look at it with the aid of physical science; yet it is perfectly exclusive of a good deal of orthodox thinking on these subjects. Similarly, when we call biology to our aid, it reminds us that "population" consists of actual living organisms, wholly different from the hypothetical economic man who is of course always worked by self-interest only, *i.e.*, by the nutritive impulse alone; since, unfortunately for the old economist, it is a fact that all living (as distinguished from hypothetical) beings agree in being worked not so much by the self-regarding, that is fundamentally nutritive instincts, as by the reproductive, that is the other-regarding ones, since



the former are always sooner or later irresistibly overborne by the latter. And when we see how the reproductive—*i.e.*, species-maintaining relations of living beings in sex, family, and community—always overpower the nutritive or merely individual maintaining ones, we get a new view of nature; we see that this fundamental postulate of conventional economics, despite the authority of Adam Smith and all the rest, was not the stern fact of nature they supposed it, inexorably contradicting the beautiful theories of poetic and sentimental moralists, but only half the truth, and the smaller and meaner at that; in fact no better than a gigantic blunder, which is refuted by the simplest reference to the facts of physiology (not a science, by the way, usually credited with any over-dose of sentiment). Since, then, it is not hunger and struggle for existence, but love and association in existence, that mainly move and mould the living world,\* we have a new scientific basis for economics. Again, taking that most hackneyed of economic conceptions, that of “progress,” we find the economists of all schools wont to agree in estimating this in statistical terms of increase of population. But with this the science of progress in its true sense—that of evolution—will have nothing to do: evolution means not increased quantity of population, but raised quality thereof, a very different and by no means always compatible kind of progress.

Such applications of the physical and biological sciences as a basis on which to construct a new and rational theory of economics need not, however, be fully entered into, but these mere suggestions, rather than outlines, will serve to show how different will be the scientific economics of the future from the metaphysical economics of the past.

In brief recapitulation, then, while the economist of orthodox training is wont, not unnaturally, to suppose that his critic may be disregarded as simply a member of one or other of the existing unorthodox schools, and while these, again, have an at least equal difficulty in understanding that anyone who may offer a destructive criticism of them is not at least a covert reactionary, the preceding proposal is that of making an entirely new start. It gives up Mill and Marx alike as going back together to the same intellectual ancestry; it seeks to trace them through Rousseau, Leibnitz

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\* The contrast between this view of evolution and the doctrine popularised by Mr. Darwin may naturally seem serious; but this will be found more fully justified in the writer's forthcoming article, “Variation and Selection,” in the “Encyclopædia Britannica.” It must suffice here to point out that Mr. Darwin's classic view of progress, through struggle for existence amid superabundant population and the consequent survival of individual advantages, was far too much a simple reading of the facts of nature in terms of Malthus and the current individualistic economics. Whereas, whether (1) we correct the economic theory upon which it rested, or (2) we adopt the proper biological course of re-examining the facts of organic nature without reference to prevalent economic theories at all, we find that the survival and advance of living beings are both determined in far greater measure than by struggle (1) by the degree of adaptation of the sexes, (2) by the increasing reproductive sacrifice for the production of offspring, (3) by the subsequent increase of parental care, (4) by the degree of association attained by the members of the species. Such an extensive and detailed correction of the theory of survival of the fittest (from most individually competitive to most self-sacrificing and social) affords, of course, the required scientific basis for the co-operative and socialistic position in the widest (*i.e.*, altruistic) sense, at the same time removing the existing supposed scientific demonstration of the individualistic one.

and Wolff, and other exploded last-century philosophies, to yet more hopelessly defunct mediæval ones; whereas the fresh start advocated postulates nothing save the ascertained facts of the physical and natural sciences, and seeks to re-examine the economic structure of society by their aid. The only objection which can be urged against this method is that it seems to undervalue the labours of preceding economists; but this is not so, since all that is true in these must be verified by this independent method of investigation, and will thereafter shine all the brighter for the assay.

It is time, however, to pass to another line of treatment of economic theory, which may again serve to show how different must be the new science from what has hitherto done duty for it.

The problems of wealth have long been grouped into the three familiar departments of production, distribution, and consumption; and since the existing practice and theory of production is broadly accepted, while no theory of consumption exists at all, the concentrated weight of criticism falls upon the questions of distribution. Since material progress is disappointing us, distribution must be somehow to blame: here, then, must lie the problem to be reinvestigated, and here too must be the defects to be reversed. On this point all schools are agreed, for even those who profess to regard the existing mode of distribution of wealth as final, seek to mitigate its more serious inequalities by means of poor-relief, of more or less organised philanthropy or the like; *i.e.*, by partial schemes of redistribution; among which also the proposals for bi-metallism, be they right or wrong, can hardly escape being reckoned.

That the schools advocating a serious amount of practical change have perhaps over-accented this general alteration of standpoint from production to distribution, while more conservative economists have tended to underestimate its theoretic importance, need not be insisted on. It is not necessary to do more than glance at that transformation of political issues which is now rapidly setting in, questions of redistribution of material wealth constantly tending to replace those of redistribution of political power. Again, that it is to this stage that economic discussion has now fully come, has been so obvious since the unparalleled interest aroused by "Poverty and Progress," as to render unnecessary any further citation of contemporary literature; but the formal treatment of the social problem in terms of wealth-distribution alone may perhaps be said to find its historic moment of classical statement and unanimous acceptance in the recent Industrial Remuneration Conference,\* since not only the questions laid down for discussion, but their whole treatment—nay, the very title of the Conference itself, were entirely from this point of view. And of course it is in this that socialist and co-operator agree and differ from the capitalist; they seek to modify distribution above all things: capitalism looks only to the continual extending of production; hence, for instance, Lord Salisbury frankly tells us that the true method of removing social distress is by extending our markets.

Amid such controversy there is therefore little immediate hope of hearing for a new writer, who, instead of manfully taking one side or the other, cries for truce and

\* Report: Cassell and Co., London. 1876.



a change of issue. Yet since no school but is fairly logical if its postulates be granted, it is through a re-examination of fundamentals that a solution is likely to be reached; and without denying the importance, nay insisting upon the historic naturalness of the present distributional controversy, he would attempt the treatment of political economy from an entirely fresh starting point. Abandoning alike the earlier method of commencing with the production of wealth, and the later and derived fashion of commencing with its distribution, he would begin with the study of the use or consumption of wealth. The advantages of this reversal of the conventional mode of treatment might be demonstrated in detail; thus it might be urged that we not only escape all the delay amid merely commercial intricacies incident on the earlier method of approaching the subject, and all the disputes of a legal and political and moral nature raised by the second, such entanglements moreover rendering subsequent attempts at analysis well nigh resultless, but at once reach what none will deny to be the central problem of wealth—that for which all wealth exists—its use in relation to social progress. Social progress is thus clearly before us from the outset as the goal of material progress, and we are in this way ensured against that substitution of the proximate for the ultimate ideal which has been so prevalent in past economic theory and practice, and to which the relative delay of social progress is so largely traceable. Apart, too, from any question of practical aim, the theoretic simplification might be insisted on. But the common-sense justification may suffice: there is a certain reason, of course, for beginning with production, because an article is produced before it is consumed. Similarly an argument for commencing with distribution is at once found in the truism that the cake must somehow be got into our possession by exchange or otherwise, as well as baked, before it is eaten; surely, however, it is round the eating of our cake that the whole set of minor inquiries centre, and because of this that they exist at all. The eating secured, and continued life rendered possible, the processes of the production and the acquisition of our cake may be discussed at leisure. Again, in commencing with production, we are of course following the natural history method of tracing the evolution of the products, but in commencing with consumption we are ascertaining why such productive processes are set up at all; it is consumption which determines production far more than conversely: we are sufficiently told how the capitalist directs the labourer, but not yet sufficiently how the consumer directs them both. In short, the consumer decides what the producer shall work at; his demand for commodities determines the whole course of labour. Again, in postponing the study of distribution we avoid one of the most obstinate and deep-rooted tendencies to error. The mercantile school is commonly supposed to be dead. No one will admit that he fails to distinguish money from wealth, and nominal wages from real wages; yet this error is far more persistent than we usually recognise, and vitiates many an argument at the outset of which it was nominally excluded. The reduction of wealth from its mere notation in money to its concrete terms of materially enriched environment has never, indeed, been adequately attempted by economists, while the public remain as much mercantilists as ever; for so long as the business man continues to define “success in life” in terms of money-making, instead of money-making in “success in life,” or so long as the workman who strikes readily for a rise or against a fall of wages

submits patiently to the increasing unwholesomeness of his material surroundings or resents all outlay on their amelioration, it cannot be said that the realities of wealth have as yet been really discerned behind their symbols by either capitalist or labourer.

It is a prevalent opinion that "there are no laws of the consumption of wealth other than the laws of human enjoyment," and one of the great services of Cliffe Leslie has been to trace the curious cause and the disastrous effects of this doctrine in Adam Smith and his successors. The fundamental necessity of a theory of consumption has indeed been pointed out by many economic writers, but no such theory can as yet be said to exist. Attempts to prepare for it on the principle of analysing human enjoyment by means of hypothetical measurements of pleasures and pains not being as yet in any way verifiable by methods known to science, cannot be safely introduced. But the historical school have done much service in collecting materials for a really scientific treatment, and this cannot be long delayed.

Let us endeavour to put this in a more popular and concrete way. We all, I trust, look at children as we go along the street; we all look, at anyrate, at women. You would not judge of a woman or a child by the number of pennies they happened to have in their pocket, and the most conventional economist would point out that their personal economic well-being and their capitalised value to the community as well depended largely upon their state of clothing and feeding, and still more upon their state of housing, not to speak of education, and so on, and that their pecuniary condition was a mere bagatelle to this. But the public and the economist alike are far too prone to estimate the economic state of men by the mere money tokens they carry, and their economic importance in the production of wealth by the rapidity with which they can circulate these; whereas this is often far less important, economically, than the children's spendings—often rather corresponding, indeed, save for being less amusing, to their games of pitch and toss. That, then, is one reason why one must begin by studying not what money people have got but how much material wealth they are consuming, and how.

Again, it seems logical to begin with production because producing an article comes before consuming it; but production is determined by consumption: you can't tell what people are going to produce until you know what their customers are going to consume. We have always been told how the capitalist directs the labourer: we are far too prone to overlook how the consumer directs them both, how a demand for commodities is a command of labour. We thus see, in short, that the special study of processes is only for specialists, the economists' business is to press forward to the real problem of consumption, to study not the thing in making, but the thing in use. And thus in every way we need a new theory of political economy before our practical advances can be certain or clear.

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## CHAPTER III.

## ACTUAL ECONOMIC PROGRESS AS A SOURCE OF ECONOMIC THEORY.

SUCH, then, are only two or three of the revolutions in economic theory which are in actual progress, and it is clear that in such a topsy-turvy state of doctrines the corresponding action must be greatly hindered, for not the slightest action, good or bad, can be definitely performed until thought on that subject has worked itself within sight of some conclusion. Yet, on the other hand, action can never wait till theory is complete—nay, theory only clears itself as action progresses; thus it is a special merit of Dr. Ingram's treatise to expound the successive economic theories which have borne sway in men's minds as simply the generalised verbal expression of their accepted everyday practice. In other words, men did not make theories first and endeavour to fit practice into them afterwards, like the constitution makers of the French Revolution, or most socialists to-day; but they observed the practice going on in actual life around them, gave it clear verbal expression—*i.e.*, theory—and explained it to their fellow-men with a view of making their practical action more rational. And here at once arises a ready means of contrast between co-operator and socialist, by no means to the advantage of the latter, who too commonly commits himself to an untenable position. Reversing Kingsley's famous counsel, he too often dreams noble things indeed, but does none all day long; yet this, too, is a kind of practice, and so gets at once systematised in his mind into the promulgated theory that until everything and everybody is ready for the millennium nothing can be got ready at all. Here, on the other hand, lies the great strength of co-operation, that it does the daily duties which lie nearest, refuses no bird in the hand to-day for the sake of two in the bush to-morrow, and thus not only lives and grows, but daily strengthens towards larger tasks; since, in fact, getting a bird into the hand to-day is the best practice for getting two out of the bush to-morrow.

Leaving, then, the political economy books to work themselves clear, can we not get light from the best action observable around us? Even the benighted capitalist often gives a lesson by which the members of more enlightened schools may well profit, for, beside Robert Owen's splendid efforts, or the almost equally famous labours of Leclaire or Godin, we have had many a less ambitious essay towards the bettering of things from the capitalists' side, and these attempts are growing commoner and commoner so rapidly that it often looks as if one of these days some conservative Bismarck or Rothschild might set about dishing the socialists altogether. Mr. Ruskin was not the first rich man who has scattered a fortune over his social ideals, nor will he be the last; for, without speaking of higher motives, the making of men is, in fact, happily so much more interesting than the spoiling of them that even the capitalist in search of new ways of amusing himself can hardly help sometimes finding this out and acting upon it. The ambitious man will do the same

instead of going into Parliament, and these cases must grow more frequent, as on the one hand the need grows more generally perceived, and on the other the methods become better understood. Social ideas are at present diffusing fast and far, and, despite all rocks ahead, we may become increasingly confident, as the next few years roll past, that never before in history were there so many men eager not only to ring out the old century with all its wars and wrongs, but to ring in the new one well.

While no one has yet succeeded, then, in reorganising the theory of economics, we cannot but feel that we are fast travelling into another economic atmosphere, laden with new and still cloudy elements, which must surely cool and crystallise and settle into clear, intelligible forms. Even the professed economic theorist thus need not try any longer to evolve a new society out of his internal consciousness; like every other man of science he must think and experiment alternately; in fact think things out as he lives them out, for there is no other way. This is, of course, very much what the co-operator is doing already, and hence it is with him rather than with the socialist that the cautious economic theorist has hitherto found it possible to work. Let us note, then, some of the differences between the keenly individualistic type of society which is passing away, and the comparatively socialistic type which is coming in. We might take especially the political evidence, and note how fast the web of new social limitations—Mr. Spencer's "Coming Slavery"—is being spun; but a pleasanter and perhaps also less familiar side of the same movement, certainly one far less open to hostile criticism, is that which is now commencing to draw together the loosened bonds between man and man. Modern economic theory and practice, says a great French writer, "have so developed the notion of independence at the expense of that of co-operation, that the idea of society disappears altogether, to have come up in its place only that of a sort of confused agglomeration of individual units—contracting with each other for certain mutual advantages, indeed, but without either any past or any future in common." The first half-century of this sort of progress, devoted as it was to mechanical development almost pure and simple, naturally produced in its horribly overgrown and overcrowded towns a mass of evils, physical and moral, which the dullest could see called urgently for mending. Hence arose hospitals and charities without number; and although the actual services hitherto of these modern charities to the net diminution of human suffering has been gravely questioned, they have at anyrate served as an outlet for those other-regarding instincts which the orthodox economists spent so much logic in hammering and fencing out of the field of industry. And hence arises the quaintest yet most tragic peculiarity of our industrial age; we first exclude the social and species-maintaining instincts from any share in arranging or directing the processes of industry, which we decide exists for purely individual ends alone, and then we tardily readmit those instincts into play, build hospitals, asylums, and what not at an unparalleled expenditure of the costliest results of our labour, in order to patch up some trifling fraction of the evil which the initial mistake of the exclusion of these instincts has caused. And out of such practice, of course, arises a corresponding theory: "business," we think, "is business, and charity, charity." Unquestionably so: great, truly, is the modern principle of division of labour; mere old-fashioned "usefulness in one's day and generation" had to be both in one. But as, by dint of founding hospitals for the collection of every



form of artificial disease and incurableness, the philanthropic eye became educated to discern some of the more ordinary shades of misery, new and finer developments arose; from alleviating the sufferings of diseased bodies gradually arose the notion of preventing them, and the retail apothecary-doctor thus became a wholesale hygienist. He is almost ready now to take one step more and become a captain of industry, a city-builder, like Dr. Richardson, offering to give us an ideal Hygeia instead of an actual Toxicopolis; but that would have too disastrous effects upon both "business" and "charity." What would become both of our builders, and of their present liberal subscriptions to the local charities they provide subjects for? Clearly we must not criticise the principle of division of labour—it would be quite "unsettling."

In this way the aspects of bodily life having first come up for treatment, the mental life has had its turn. First, of course, the museum of lunatics; next the idiot schools, the deaf and dumb institutions; at last the public schools, in which, after the old incentives of theological prejudice and grammatical pedantry had been formally replaced by the individualistic and baby-farming one of payment for results, there is at last appearing some scanty toleration on odd evenings of several of the essential realities of human culture, under the name of recreative schools and the like. But had we begun sooner with these last (as children in their ignorance try to do for themselves) we might have injured the supply of lunatics.

Similarly with the higher education. The board schools were only founded half a generation ago, and already the network of university extension—incomplete, indeed, but far more living than the universities themselves—is covering the land. The scholar is leaving his study and coming into the market-place; University settlements, like that of Whitechapel, are already arising through the great towns, and in this effort to educate others the student still more educates himself; and the age of moralised social science thus gains steadily upon that of unmoralised mechanical struggle, misnamed industry.

Without touching upon the aspects of social life, since here the prison shows little or no sign of improvement on moral as distinguished from hygienic grounds, let us note the re-cementing of human ties in the department of industry. Here, of course, the trade union and the co-operative society head the list; and both are at first rigorously specialised, the former upon raising wages, the second on making them go farther—in short, upon nominal and real wages respectively. The slow progress of the trade unions is, of course, readily explained by this exclusive concentration upon a strictly nominal object; for there is, in fact, a profound and widely human symbolic appropriateness in the well-known physiological process of mesmerism. The operator's best way is to make you gaze steadily at a brightened sixpence, held immediately above your nose—you are mesmerised, absolutely, in five minutes, and you don't get the sixpence after all. But within recent years there is rising hope that these may again develop into guilds of masters and men, civilised into a guild in the best sense by the dignity of social function, and cemented into a brotherhood by the sympathy of performing it in varying measure of strength and skill together. The corresponding expansion of the co-operative movement was easier, since its aims were concrete and practical from the beginning; and the commencing rise from retail

trade to that wide co-ordination of both action and thought implied by the co-operative banking movement, and that in favour of higher education, has already been noted.

Now, in tracing these two movements we have not been dealing with merely isolated examples, as might seem at first sight. The application of biological science to economics affords us a means of classifying all the departments of practical action—that is, of comprehending them as parts of an organic whole of social duties, not a mere maze of indefinite possibilities and special efforts, as most people think. Social activities, in fact, like so many other good things, naturally fall under three main heads in this case, according as they are concerned with operating on *organism*, *function*, or *environment*; i.e., in more familiar language, with actual living beings, with their work or with their surroundings. And not only all benevolent institutions, but all beneficent (i.e., useful) social activities fall into these three genera, belong to one or more of these three brigades. Not only charitable, but educational, medical, and other directly personal services belong to the first of these; trade unions, guilds, and in large measure also co-operative societies fall into the second; while actions concerned with housing, hygiene, art, with consumption and standard of comfort, and so on, belong to the third. It is in this order, too, that philanthropic agencies have developed; and it must be remembered that these, however often they may be maudlin in spirit, imbecile in methods, or mischievous in results, have yet always their useful, nay, sacred and noble side. They express both the wide awakening of social self-consciousness and sympathy, and its transformation into practical action; and it is only now that this development is approaching an end that the requisite union and concentration of their aims and efforts is becoming possible. This has been called “the age of societies,” and so far truly, but the age of new societies for every special purpose is drawing to a close, and the reverse wave of union is in progress; what we now see many beginnings of is the formation of societies of societies. And as this process continues, we shall proportionally cease to think in the conventional way of “our own society” (whatever that happens to be), that is, we shall stop praying or drinking for “Its Health,” viewed merely as a little congregation of the chosen people struggling for existence in an inhospitable world of uncircumcised Philistines, if not active persecutors. And we shall gradually come, in fact, to look at it as having no other ground of existence, much less possibility of health, than as a responsible and active organ, charged with certain special functions to a larger brotherhood—nay, ultimately to that society of societies of societies, which is Society itself.

After an analysis and synthesis of this sort, in proportion as we can think it out in detail, we shall come into a position to attempt the treatment of practical questions, whether special ones such as the state of the poor, or the great general one of the advancement of human progress. For we see that practical action, at present dispersed into special and unco-ordinated efforts, each dealing with some aspect of organism, function, and environment alone (or of some mixture of these), must, on pain of failure, attempt the synthetic treatment of all.\*

\* For the statement of the preceding argument in relation to general economics, Cf. the writer's “Analysis of the Principles of Economics,” (Williams and Norgate: 1885.) p. 30-31.



But we set out at page 298, not so much to investigate in detail what practical action was expedient, as to attempt to see what the best actual movement of the world might be, and what light it could afford us : our problem was not so much to carry our previous theories into life, as to read the purport, and see the direction of life as it is going on around us, and thus re-form our theory. And so much at any-rate is clear : we are passing out of the age of competition into that of co-operation ; out of individual isolation for personal winnings into social reunion for the public weal : we see clear hope of yet raising the Struggle into the Culture of Existence : and we know that into this dawning ideal the essential aims of the philanthropist and the reformer of yesterday, the co-operator and the socialist of to-day, the citizen and humanist of to-morrow, despite all errors and wanderings, are beginning fairly to converge and even combine.

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#### CHAPTER IV.

##### CO-OPERATION *VERSUS* SOCIALISM IN PRACTICE.

HAVING thus formed, though not a detailed theory of economic action, at anyrate some general idea of the actual currents of social change around us, as well as of the winds of doctrine to which these currents, warm and cold, give rise, it is time to be looking at co-operator and socialist as rival navigators, each inviting us to take immediate passage with him towards the land of promise. Now, while we are far from denying the possible existence of such a better country, despite the general disagreement, save in indefiniteness, of all current descriptions of its nature, distance, or even whereabouts, we cannot but feel a certain shrinking from the manifest perils of the transit, even though we may have braced ourselves fairly up for parting with the familiar shores. We would fain be sure of a safe, and, if it may be, speedy and gentle passage across the unknown sea. No doubt the hearts of some of us have waxed fat in past days of dull prosperity, or our courage been beaten down by long privation, yet it is not wholly fair to call us cowards. Our wives and little ones cry for daily bread, and who shall find us that upon the voyage, even though untold milk and honey be waiting for us upon the further shore ? The co-operator, indeed, promises us some victual, and makes cheering show of overflowing stores, but for such anxious thought for the morrow the socialist hotly reproves us, pouring forth the quaintest mixture of apostolic fervour and nautical abuse conceived by any mortal since the stirring days of Salvation Yeo ; yet now and then throws in attempting "aside" about the heavy-laden treasure galleons we shall encounter by the way, which gives the last touch of resemblance to the way of thinking of that pious and picturesque old buccaneer. Leaving the quay, then, for a little, let us quietly turn matters over in our heads once more.

We noticed in a preceding chapter the hopeless bankruptcy of the old economics, and something, too, of what was wanted from the new. Does not socialism claim to meet these obligations ? Has it not incorporated and utilised contemporary science,

and so got rid of all those survivals of the antique logic, and metaphysics, and theology and philosophy which are so thickly scattered through the conventional treatise or leading article—nay, which, however dry and imperfectly articulated, constitute its very bones? And does it not offer us a scheme of action at once simple and intelligible, immediate and effective, complete and final? Then, too, has it not eliminated the gross class-bias of the older schools, to overflow with generous sympathy with the people? Instead of the pretended ethical neutrality and actual consecration of pure selfishness of the individualistic theory, is it not everywhere warming and lighting up our dull and chilly modern life, everywhere swiftly superseding our scattered and bushel-hidden rushlights by the glow and radiance of the new-found electric fire?

Questions of this kind clearly cannot be answered with an absolute negative—as little, however, with an unqualified assent; for, when we approached the subject with a fresh eye from the side of the sciences, as argued for in Chapter II. (page 293), we were obliged to admit, no matter how much our sympathies had been attracted, that current socialism, despite fair talk of science in general, has availed itself about as little of its actual aid as the older schools were wont to do. The old philosophy, in fact, survives; we find no real application of physical science to human affairs, although the doctrine of energy furnishes at once the best instrument for investigating the actual primary possibilities of material wealth in general, and for special problems like that of the nature of interest. As for biology, we seldom get beyond a crude misstatement of the laws of population; poor Malthus being again, as of yore, “a nasty, bad man;” Darwin and the struggle for existence are nowhere adequately faced or met; the constitution of the human mind is hardly mentioned, though the socialist is ready with plans for compulsory education in his own image. Coming to the vast field of the social sciences, we find, with too rare exception, little mention of history at all, and no adequate appreciation of the services of the past, or conception of its all-pervading influence. Despite, too, the supreme importance to the socialist of the reverent study of the Middle Ages, and particularly of that civic and communal life of the twelfth and thirteenth centuries, towards the recovery of which everything that is best in our modern civilisation is slowly struggling, we find too often that hideous travesty of the mediæval past which the Reformation painted with the colours of its decay, and the Revolution bespattered with those of its own. In economics, distribution is, of course, all-important; modify this, and all will forthwith be well. Here, of course, we have the central dogma and panacea. If you indicate a doubt of either the final completeness or the initial practicality of these, you might as well be a bourgeois at once, and a speedy alternative between the sword or the “*Das Kapital*” is the best that can be promised for your soul’s health; while, if you express a timid belief that a little time of study and reflection might show that the resources of human thought have not been finally exhausted, even by the production of that important work, you are crushed with substantially the same rebuke as were the Alexandrian bookworms by the victorious Omar. For the Koran is complete.

But the moral warmth, the glow of social feeling, surely these cannot be amiss, even if the science be scanty? Granted; yet the Salvation Army has these, every



wave of fanaticism the world has ever seen has had these, and it is surely time to recognise before rushing into new disasters that the theoretic and practical deficiencies of a system are not atoned for—nay, in history have been usually aggravated—by the religious fervour of its exponents. The mere libeller of socialism likens all its leaders to Walter the Penniless, whereas not only many a knightlier figure rides glittering in its van, but souls as piously enthusiastic as Peter the Hermit, as freely self-sacrificing as St. Louis, march with cross and aureole before; yet our new crusaders are doomed, like the old ones, by bitter experience to learn that neither the temporal nor the spiritual sword can ward off the consequences of ignoring the physico-biological question of definite map, and the economic one of definite commissariat, armed with which the great strategist of our age has quietly organised his long career of victory. It is the commonest of historic errors. Savonarola with his eloquence, Cromwell with his strength, each burned with the sublimest moral intensity, each flashed upon the world an all-persuasive or all-victorious sword, yet each tragically failed in his task; and his clean-swept house was speedily defiled by seven worse devils than before. The social movements, like the armies, of old, were led by soldiers and priests; and rightly, for these were the men of action and the men of thought in their day; but our modern movements (and the socialist one, perhaps, in particular) are too often led by feeble, or at anyrate untrained, representatives of these, who, indeed, threaten reversions to pre-industrial modes of action, and talk in dilutions of strenuous old thought, but show little organic power of either one or other. (The real man of action, alas, still sits eager over his gigantic costly toys of soot-furnace or cannon foundry, or in besotted strife over his game of monetary cards, only to go at last into paralysed "retirement" upon his "fortune"—bound or broken upon its wheel. The man of thought is investigating the fourth dimension of space, the embryology of the sea-anemone, or the social etiquette of the Nyam-Nyams; neither can be got at present to hear a word or care a straw for what is happening to their fellow-men without them in the actual world.)

The socialistic enthusiasm, then, is at present far more dangerous than helpful; for this comparison with the lower forms of past religion might be continued into the minutest detail. The hope of the Coming of the Kingdom is indeed the noblest of human ideals; but it is a strange pity to see naturally good men reviving all the crude hopes of ancient Jews or mediæval Anabaptists, and looking simply for it as the immediate forcible establishment of essentially alimentary abundance (whether by a simple physical victory or a formula of faith minus work, matters nothing), instead of the slower moral reorganisation of a nobler wealth. Of course the socialist denounces this criticism offhand as a mere moral platitude, if not worse. Hear Mr. Burns roaring—"Moralise capital? You might as well try to moralise the lion who was about to devour the lamb!" But here the co-operator, who, however he may be flattered by this comparison to the king of beasts, can hardly be expected to admit this view of himself as a mere consumer of lamb, may be safely left to reply. There must always be a difficulty in clearly realising the fundamental paradoxes of every science; how the flat world is really round, and the moving sun is, relatively to us, standing still, are doctrines which people are afraid to deny, but often hardly understand, and seldom can explain, much less clearly prove. Much more hard is it for

men to understand that fundamental fact of mental and social science that strength is the everlasting slave of the imponderable thought which lies behind it; yet since man tamed the first horse, the principle has been growing steadily true. To fail in this subjugation argues no failure of the principle, but only a personal, mental, or moral insufficiency to the task, if not both; and these, therefore, need patient strengthening, not petulant abandonment. "The reason why men do not obey us, is because they see the mud at the bottom of our eye."

In the very interest of justice to the purest ideals of socialism itself, as well as of orderly social progress, it is right for us to speak frankly of the faults of its contemporary presentations; and if the socialist loses his temper and breaks into general objurgations in reply to these detailed criticisms, coolly to point to this as a further detail of that analogy to the lower forms of religion we were mentioning a little ago. It has been already pointed out how the contemporary socialist literature is filled with the converse errors to the orthodox ones; but the subject would afford useful scope for an entire essay. The snug optimism, the handsome ratification of society as approximately perfect, natural to the hard heart and good digestion which the older writers brought to town, is now constantly replaced by that precise form of irritable pessimism which, as every doctor knows, is the normal accompaniment of the depressed circulation and stomach which the younger race of writers too commonly get there. The exaggerated notion of the legitimate rule of the capitalist becomes replaced by hasty denials even of his provisional usefulness; the old conception of society as non-modifiable by personal intervention, as governed by inexorable "natural law," gets replaced by the converse yet self-contradictory one of society modifiable by eloquence into assuming a definite form to begin with, yet thereafter governable by inexorable artificial law; *laissez-faire*, in short, is replaced by *laissez-moi-faire*, which, as we hardly need Mr. Spencer to show, is an essentially retrograde change. We see, then, how, as a Hegelian would tell us, contemporary socialism furnishes us with that negation of previous doctrines necessary before a new start towards complete truth; but for that very reason it is not in its present form capable of acceptance as a social system. The ground, however, is clearing for building this up from the ruins of both schools.

There still remains before us, of course, an examination of socialism on its best side—an extrication, that is to say, of the many true, noble, and ideal elements which undeniably underlie even the most wild and incoherent oratory. Few people adequately realise how good a case can in this way be stated for socialism;\* still fewer know how an even better case can be stated for anarchism;† while fewest of all yet recognise in those apparently strange developments of modern thought much of the oldest, commonest, and most enduring wisdom of the human race. For though the water of life is always the same, yet it has many forms: crystallised in dogma at one moment, it may melt into thunderous clouds the next; hence it is that even the extremes of capitalism and anarchism have far more in common than they

\* Cf. Mr. Kirkup's article, "Socialism." "Encyc. Britannica." Or his "Inquiry into Socialism." Longmans. 1888.

† Kropotkin: "The Coming Anarchy." "Nineteenth Century," 1887.



seem. But this discussion need not here be entered into, since it does not affect present questions of immediate applicability to the details of theory and the details of practice; its possibility has been merely suggested in order to indicate that the preceding sufficiently definite criticisms have at least not arisen from any lack of general understanding, or incapacity of sympathetic interpretation.

## CONCLUSION.

### IMMEDIATE POSSIBILITIES OF PRACTICE.

RETURNING, then, to the conclusion above reached, that socialism, at anyrate as at present expounded, does not yet furnish us with any theory of society adequately scientific, nor any scheme of action adequately practical, we are of course thrown back upon co-operation. But with regard to this we have already seen the pressing necessity of more definitely facing the solution of social problems, and regarding the progress of the movement henceforth increasingly in terms of these, rather than in mere growth in bulk upon existing lines.

We noticed how all the ties of common interest and duty between man and man, so ruthlessly cut adrift by the individualistic order, were again steadily reuniting; how, for instance, the apparently distinct occupations of medicine and building were becoming woven again into a vast whole, that of the material hygiene of life; and how all the institutions of mental cure and development were not only tending to unify the university of the future—no longer a mere huddle of professional guilds—but rising into a vast brotherhood of education, conceived as a development throughout life, as common, nay, more common, to all men than religion or politics have ever been. The industrial reform is in progress; the trade union is awakening from its mesmeric trance; enough, too, has been recovered through isolated efforts like those of Doulton, or Elkington, or Morris, of skill of handiwork, to make the rising technical education movement possible—and so on. Is this a time, then, for mere fits of despairing hysterics and threats of dynamite? Have we ever had, in the last hundred years, so many openings for practical and resultful efforts? Are we not now, at anyrate in some respects, clearly on the lines of progress—nay, in sight of some of its strategic points? Here, then, lies the golden opportunity of the co-operative movement; before the socialist has recovered on the one hand, or the capitalist awakened (as he at last shows signs of awakening both here and in America) to realise that it even pays him better to do good work than bad, the co-operator may seize the helm. But we may be asked, coming to actual daily affairs, what is the co-operator to do? It would, of course, be an impertinence, if it were not an impossibility, for the mere outsider or the theoretic economist to suggest specific local investments; but the lines of general tendency, and even some of those of special application, are clear enough. We have seen already (p. 298) how all needed solutions lay in that alternation of thought and experiment which is

the only mode of progress in either scientific or social; we have seen, in short, that it is only by thinking things out as one lives them, and living things out as one thinks them, that a man or a society can really be said to think or even live at all. So much, then, for the most general form of the solution.

Coming next to particulars, we have noted (p. 300) how all the innumerable special movements, whether concerned with life, with work, or with surroundings, are coming again into one general whole of usefulness; how, in short, all societies were returning again into the bosom of the society which gave them birth. What is to be the place of co-operation in this return movement? shall it lead or lag? It has long sought, indeed, to make all men co-operators, but not yet in the best way. More educated than socialism, it knows that it cannot do so by either eloquence or force, and so has started on the business lines it found ready around it, of appealing to men's immediate pecuniary advantage. But this is not yet full co-operation. The secret of making men co-operators is not by offering them a bribe to co-operate with you, but making, if need be, a sacrifice to co-operate with them; that makes them first in the letter, and then soon in the spirit, co-operators with you whether they desired it or no. And this is not only morality but business: those policies do ultimately coincide; there is no way so shrewd of getting help from your neighbour to-morrow as to give him all you can to-day. The co-operator we saw is now seeking to organise both thought and industry for himself, and so far, well; but would it not be worth his while to convert the existing indifference of the men of thought, which is never even touched by the hope of discount on purchases, into energetic aid, and the half-contemptuous animosity of the men of action, which direct competition can only rouse and embitter, into active aid as well? Give the one, then, for instance, a hand in his educational efforts; encourage and employ the other in his artistic and constructive tasks; and you are soon richly repaid. For such small help as the co-operators have given the University Extension movement, for instance, they are finding, beside the general educational result, every local political economy class converted into a co-operative propaganda, which has the immense advantages of reaching new and thoughtful people, and those mainly young, and of being entirely disinterested to boot. For the large dividend, which so many have thought the whole strength of the movement, seems to many minds its central weakness.

Again, the co-operator appeals primarily to working men; and he, of course, knows (1) that different occupations and different individuals are of all ranks of skill and intelligence, of thought and culture—most of all, of social feeling; and (2) that the conversion of their actual leaders is a gain out of all proportion to the ordinary increase of the rank-and-file of purchasers among their wives. But who are their leaders, for surely they have been fully appealed to? By no means. It seems one of the strangest evidences of how little wisdom the world is governed withal. Is it not a most regrettable oversight in the whole past strategy of co-operation that it has not attempted, and even yet does not attempt, to reach these leaders—that it does not even seem to know them when it sees them? For we forget that our modern city, with its familiar capitalists and labourers, is still only the ancient one, save that its miners, smiths, and weavers have multiplied out of all proportion to the rest; so that the higher craftsmen are now an unnoticed few, and those half starving, and mostly out of



employment. Others have had to disguise themselves in black coats to please the handful of people who still give them a little job now and then. Who, then, are these natural and eternal leaders of the men who work with their hands? Assuredly none but the artists. Who else have skill and intelligence, who else have thought and culture to compare with these, fallen and struggling remnant though they are to-day? Where, in the history of labour, shall we find not only such infinite creation of enduring treasure, but such social and ideal enthusiasm, such self-sacrificing toil, such perfect collectivity and organisation of labour? and even now, where shall we find such overflowing wealth and generosity of nature, seeking only channels to irrigate the world? The progress of labour suffers too for lack of organising, as co-operators well know; but who among even the capitalists have such power of resource and practical organisation as the really effective architect? It is an insult to compare him with the ordinary beaver-capitalist, and even with the banker and railway director he would soon learn to hold his own. The particular form of practical action here suggested has, of course, a certain unfamiliarity—it is, in fact, expressly chosen among many possibilities to awaken unconventional lines of thought. But it may be said, “Our fathers, the old co-operators, had no artists among them; what do we want with such new comers at all, still less as intruders among our very leadership?” That would be, of course, precisely the stock argument of all blind Toryism (which is a mental attitude, not a party). Moreover, without denying a certain importance to the traditions of our ancestors, at anyrate when, as in the present case, the ancestors were good ones according to their lights, we are constantly obliged to see those lights were limited. Certainly in this case particularly so. Forty years ago there were fewer artists even than now, and the Rochdale Pioneers had no possibility of coming in touch with them at anyrate; moreover, a whole past of artisan Puritanism had obliterated the love of beauty from life, and so prepared for its thorough expulsion from British industry. But now that the practical man and the theorist alike are learning that not only are things of permanent value in proportion to their beauty, but that life is good in proportion to its surroundings, it is time we were coming, like the churches around us, to raise our actual practice and relax our traditional creed. The proposal, in fact, is, to have done preaching—upon, say, the particular example of the painter Leclaire as monks do upon the life of their favourite saint, but to proceed instead to the wholesale and co-operative production of more Leclaires, to make actual living co-operative saints out of the existing raw material of thoughtless sinners around us, whose painting and building alike are so poor in quality for lack of any co-operative and social task. Starting from this unconventional proposal, and drawing out the fire of criticism as much as possible at the outset as “unconventional,” “sentimental,” “aesthetic,” and what not, the writer had hoped to work steadily back through such special questions as of co-operative building societies, to the general question of standard of comfort and surroundings altogether; that is, of raising the civilisation, well-being, and material reserves of the community in general, and the working class in particular; “standard of comfort” being treated no longer as a mere abstraction, but in definite *grades and degrades*, up and down through civilisation and barbarism, from the plenteous comfort of the mediæval peasant and burgher down to the fetid little one-roomed

## CO-OPERATION AND EDUCATION.

drudge-hutches of modern Glasgow, Edinburgh, and London.\* For, while by no devising of distant redistributions will it be possible, even were it desirable, to give the artisan, degenerating in his poverty, the conditions of the upper and middle classes, at present usually degenerating amid unreal wealth, it is assuredly possible in proportion as we face the daily immediate reform of consumption and production, swiftly to reverse the real extremes of social life; to exchange the ignorant and hideous, stupefying and degrading monotony of life which goes on in both east and west ends of the modern industrial town, for the noble public splendour and refined private simplicity of an antique Greek or mediæval city. But this rose as its co-operative industry culminated in socialised art, and fell as its social ideals clashed with the facts of moralised science. All these four elements now exist in some measure among us, albeit separately; their co-operation only is needed, and so we come back to the question with which we were met at the outset (p. 288), as to how far the existing co-operative organisations may rise to the situation? If this come about, as we trust it may, our modern tragic antagonism—of capitalism, with its sadly unideal practice, and socialism with its sadly unpractical ideals—must alike steadily rise and merge into a truly practical—yet nobly idealised—everyday life of true, that is, full and developed, Co-operation.

## CO-OPERATION AND EDUCATION.

BY THE REV. T. G. DAVIES.

EDUCATION, like other benefits which spring from human forethought and support, is a plant of slow growth. It requires time, as well as an amount of material prosperity, before it can impress upon men and women the need of its importance. The indifference of governments until, comparatively speaking, recent years to the subject of public elementary education, and the opposing influences even in the present day which hamper the introduction of technical instruction into our primary schools, are well known to all educationalists. The question of expense with some minds, the dread of over-educating the masses with others, and the uncertainty with many as to the results of a general education upon themselves and their circumstances, tend to limit the support accorded to educational progress and to stay its advance.

When a State, speaking through the collective wisdom of its legislature, displays in its actions such lamentable shortsightedness to a people's true interests, we are not surprised to find many of its citizens not yet fully alive to the urgent need for educational improvement. Water cannot rise beyond its own level. Governing bodies are but the official representatives of their electors, and the two act and react

\* See Thorold Rogers: "Six Centuries of Work and Wages." Gatti de Gamond: "Histoire de Belgique;" or any other school-history of the Netherlands.



upon each other. Both, however, have their respective duties to perform for the common good. Upon the elector lies the responsibility of a wise and prudent choice. With the elected remains the duty of turning to the best and highest account the powers entrusted to him. By mutual confidence and forbearance, and by joint co-operation, difficulties are conquered, and reforms are secured. The neglect of the past should be no excuse for the apathy of the present. Shortcomings, when recognised, should but stimulate us to further endeavours to remedy all deficiencies as public approval affords us the opportunity.

Co-operators as a body in their separate societies have been equally guilty with others in the past in not valuing at its proper worth the power of education. They do not as a whole even yet fully understand how mighty are its influences in extending the knowledge of their principles. The early pioneers of co-operation were far wiser in this respect than many of their successors in the present day. They knew the importance of educating their fellow-co-operators, and they made provision for this end by suggesting that a certain percentage of all profits should be devoted to such a necessary purpose. The severe struggles, however, which the working classes have had to undergo in order to ensure the triumph of co-operative principles, and the urgent need for securing for themselves and families increased independence and comfort, have hitherto caused the claims of mental improvement to remain temporarily unrecognised.

Things are now altering for the better. There are a ready signs which teach us that co-operators are becoming more alive to the importance of education. The success of co-operation is now so ensured, its profits are so large, and its benefits have extended over so numerous a portion of the community, that its members are beginning to see that time and an enlarged knowledge of its usefulness are alone required to increase still further the triumph of its principles.

The great extension of public elementary education of late years affords golden opportunities to co-operation. Working men and women can now read and think for themselves, and the numbers of possible co-operators are practically unlimited. Societies which adopt a prudent course of action, and which afford openings for mental improvement and social converse, will be certain to secure the confidence and support of their members, and in not a few cases also will become centres of attraction to all classes of society.

That endeavours are being made in these directions are clear. The educational committee of the United Board has set a good example in this respect, and would doubtless do more had it larger funds at its disposal. From its latest report to the Central Board we learn that "it is making special efforts to extend the University Extension Scheme of Lectures to Co-operative Societies," and hopes to secure "special chapters on co-operation in primary school books to be shortly published by Messrs. Cassells, and Nelson and Sons." Its desire to impress provident habits, to inculcate thrift, and to awaken thoughtful consideration in youthful minds, as well as in later life to offer to those who value them the advantages of high intellectual training, is certain to recommend itself to the approval of the community.

In impressing also upon societies the advisability of increasing the sale of its accredited paper—the *Co-operative News*—amongst their members; in asking for

educational returns from the different sections; in offering prizes for the encouragement of co-operative classes; and in supplying societies with lists of books most suitable for special and general reading, the committee is engaged in educational work of no small importance.

When we turn to the different sections, although the progress has not been rapid, and the support accorded to educational improvement varies considerably, still a deep and growing interest has been displayed in its advancement by many earnest and able workers.

The sums granted for educational purposes by co-operative societies in 1886 amounted to £24,254, of which England contributed £22,446 and Scotland £1,808. When we remember that the amount given in 1873 was only £7,107, and £16,788 in 1883, the increased support accorded to education during the last three years shows a growing appreciation of its value.

That much, however, yet remains to be done to impress upon co-operators generally the duty of supporting education, is clear from the grants made towards that object in 1886. It is generally agreed that the sum of  $2\frac{1}{2}$  per cent of profits ought to be expended on educational purposes. The amount given in the year referred to was only some 14s. 4d., or not quite  $\frac{3}{4}$  per cent. The annual returns for 1886 also show, that out of 1,409 societies in England and Scotland only 393 possessed any educational fund. There is much lee way yet to be made up by co-operators in the matter of education before their principles will command that attention, and obtain that support, which under more liberal auspices they might otherwise secure for themselves. The fact, however, that societies have increased their grants, educationally, some 33 per cent during the last three years, is encouraging.

The best means of arousing an increased interest amongst societies generally in educational work has long occupied the attention of many thoughtful co-operators. The reports of educational committees; the valuable papers read by different contributors at the annual conferences, and followed by after discussion; and the numerous pamphlets emanating from writers of repute, contain a mine of information to those interested in this question.

A subject so vast and comprehensive, and embracing within its sweep such a wide variety of interests, can but be touched upon imperfectly within the limits of an article. We shall be content should our endeavours meet with the approval of our readers, and if any suggestions offered for their consideration should in some small degree assist in awakening co-operators to the growing importance of the education question.

The duty of training up the rising generation with an intelligent knowledge of co-operative principles is becoming more necessary day by day. The veterans of the movement, the fruits of whose labours, foresight, and self-denial we enjoy, are passing away. If co-operation is to be as successful in the future as it has been in the past, it must supply for its use from its own ranks leaders of equal prudence, intelligence, and perseverance.

Co-operative success has taught capitalists, and in many cases private traders, the power of combination for purposes of purchase and sale, and co-operators must learn



that their system means something more than mere pecuniary advantage, before they will secure for themselves the full benefit of their principles. The quarterly or half-yearly dividend is a matter of deep importance to members, but it may absorb the attention so much as to make men forgetful of other advantages offered by co-operation. We have known cases where exceptionally high dividends have imperilled the success of a society, and so endangered future profits, as well as other corresponding gains. Were members properly educated in co-operative principles they would escape such perils. They would then know that dividends when too high imply one of two things—either they are paying too much for their goods, or they are giving private traders opportunities of attracting members from their stores by underselling them.

An organised and liberally-supported system of education can alone preserve co-operators from these and kindred mistakes. It would help, also, to teach such persons that co-operation was intended to give to its supporters some things in addition to pecuniary advantage and increased material comfort. It would show them that it afforded its members opportunities and leisure for mental improvement, needful recreation, social converse, and a useful training in good citizenship generally.

Material advantage, self-improvement, and a desire to add to a common happiness, are all equally the objects of co-operation. To secure these benefits for all should be the aim of every society, and to acquire them an educational fund is a necessity. The amount granted will depend upon the liberality of the members, and will vary according to their needs and intelligence. Where the hope of obtaining the maximum sum of 2½ per cent on profits would be futile, the minimum amount voted should be accepted gratefully for a commencement. Where tact and opportunity are used in introducing the subject to a society, and care is exercised in selecting an intelligent educational committee of both sexes, the work of education often secures the popular approval and support of the members.

Every society, to our thinking, should aim at securing for its members a common centre, where they might meet as occasion required. Libraries, whose shelves should contain a well-selected general literature, embracing more especially fiction, history, and biography, as well as works bearing specially upon co-operation and economical subjects, are greatly needed. Newsrooms, upon whose tables should be found a good and interesting collection of magazines and papers, would prove a great source of attraction to many. Great care should be taken in having all such places of general resort well ventilated, lighted, warmed, and made as comfortable and attractive as possible. The selection of librarian, or caretaker, is a matter of importance. Only persons of conciliatory demeanour, prudent firmness, and willing disposition should be selected for such posts. There are many of our large towns which possess no free libraries nor public reading-rooms; in such localities the establishment of such by co-operative societies would be a means of educating their own members, and of uniting them closer to one another. They would also be found one of the cheapest and most attractive advertisements for recommending the principles and benefits of co-operation to the general public.

Social intercourse in the form of occasional tea parties and cheap trips; entertainments, by way of evoking the musical or oratorical powers of members; improvement societies, where papers bearing specially upon co-operation and other subjects could be read and discussed; the formation of women's guilds, with especial reference to their influences on children's improvement and recreation; science and art classes under able teachers; lectures, both instructive and entertaining; and gatherings of a kindred nature, both educational and recreative; all these play no unimportant part in different ways as educational agencies. From their variety and suitability to all ages and both sexes they will be certain to recommend themselves in a greater or less degree to a large number of members.

The important position now occupied by many societies; the leisure and independence possessed by some of their members; the prudence, economy, and success of co-operative administration; the liberality displayed by co-operators towards charitable and philanthropic requirements in their individual localities, as well as the support they have accorded to intellectual improvement in connection with our Universities, have rendered them a power for good in many places. It is now an open question as to whether co-operators might not still further utilise their opportunities for the increased benefit of the community in their separate centres.

Political opinions and religious views are wisely left by co-operation to the individual consciences of its members, and occupy no attention in a society's management. There are public positions of trust at the disposal of the people, to which, we think, co-operators of character, ability, and leisure ought, when opportunity offers, to aspire. These posts could often be secured by such candidates without in any way imperilling co-operative success, or clashing with the recognised principles of co-operation in the matter of creeds or politics. When properly filled by prudent and conciliatory representatives, such men would greatly help in educating public opinion in favour of co-operative principles.

School Boards, Town Councils, Boards of Guardians, and kindred posts of public trust, which have to do with the education of the young, with local government and the question of finance, with the support and causes of poverty, and similar subjects of general interest, all these would afford co-operators opportunities which they would know how to turn to account for the benefit of those they represent, as well as for the spread of their principles. Private traders know well the advertising power, in a business point of view, of official position, and co-operators, if wise, will not neglect such openings when they offer themselves for their acceptance.

As co-operation is dependent for its success upon the support of its members, and is practically indifferent to official patronage, co-operators are freed from the suspicion of interested self-seeking, which often attaches itself to other candidates. They can speak and act with an independence of character not always possessed by other classes in the community. The experience and self-control, the business aptitude and ability of expression, the prudence and conciliatoriness acquired by co-operators in the management of their societies, would fit them for holding positions of public trust, recommend them naturally to public patronage, and would show the people in a practical manner the educating and improving powers of co-operation.



The idea entertained by some co-operators that educational grants tend to lower the dividend paid per £ only requires a study of the annual reports to show the hollowness of the supposition. The returns from the different sections afford us societies varying in the number of their shareholders, the amount of profits realised, and the sums devoted to educational purposes, yet all paying large average dividends to their members. Bury, for instance, in 1886 had 10,152 shareholders in its society, made £46,587 profit, gave £1,000 to educational purposes, and paid a dividend of 3s. 3½d. in the £. Blaydon, with 4,356 shareholders, and profits amounting to £31,330, voted £670 for education, and paid a dividend of 3s. 1d. Durham, with a membership of 2,779, and a profit of £14,952, granted £161 for education, and paid a dividend of 3s. 5½d. Wallsend, with 1,985 shareholders, and profits amounting to £10,482, devoted £251 to purposes of education, and paid a dividend of 3s. 1d. Sandbach, with 779 members, and £2,515 profits, spent £61 on education, and paid a dividend of 3s. Millgate, with 338 shareholders, and a profit of £2,816, expended £21 on education, and paid a dividend of 3s. 10¼d.

The above examples, taken from the annual returns for 1886, clearly prove that a high dividend is quite compatible with the support of an educational fund. Where a prudent management exists, common sense teaches us that, given co-operators of equal capabilities and opportunities, the societies which in addition possess the most intelligent members will naturally secure for themselves advantages over others.

Increased support accorded to technical instruction would often be of great advantage to societies. It would enable members to select committee-men possessed of the requisite knowledge, enabling them to judge of the quality and value of goods purchased for the stores. This has been clearly shown at Accrington, Bolton, Oldham, Rochdale, &c., where purchases can be tested in their chemical laboratories, and through the technical education of various kinds afforded to the members of such societies. Were co-operators more generally aware of the practical benefits that would accrue to themselves in enabling them to ensure the purity and quality of their goods, through their support of educational funds, the need for their existence would be more generally recognised.

Increased information, which can be best secured by supporting educational agencies, is much needed by many co-operators in order to enable them to understand the fallacies, and explain the misstatements made by ignorant and interested persons regarding their principles. The common charge that co-operators do not pay income tax, without explaining the fact that only when their income is under £150 are they exempt from such payment, like all other persons similarly situated, is a case in point. The attempt to lay the blame of the present stagnation of trade, of low prices, of uncertainty of work, and of decreasing wages, with many other untruthful statements of a kindred nature, can be best refuted by an intelligent knowledge of political economy, which co-operators should make it their duty to study in their different societies for protective as well as for explanatory purposes. The more the people see that the principles of co-operation are based upon reason and right, that they are productive of the greatest good to the largest number, and that they do not fear criticism, the more certain are they to recommend themselves to public approval and support.

Co-operators cannot rest content with their achievements in the past. There are forces at work in their midst which necessitate their aiming at still greater triumphs in the future. The knotty questions which arise at times between capital and labour have already in part found their solution through the educating process of co-operation, which has established a community of interests between masters, workmen, and purchasers. The extension of this knowledge is much to be desired, more especially in reference to ventures such as increased wholesale production, agricultural co-operation, co-operative banking, &c., and it can be best stimulated and imparted generally to members by educational centres in every society. Before any real advance can be made in the directions referred to, much remains for co-operators to do. With them lies the duty of discussing such subjects, arguing their probabilities, unfolding their perils, explaining their needs, and calculating their profits alike in manufacturing centres as well as amongst agricultural communities. When sufficient data have been collated in this manner to suggest a prudent course of action, and when such questions have been carefully weighed and considered in all their aspects, the educating forces of co-operation will be recognised afresh by the community. Its principles will then be seen to be productive of an increased general happiness and content, and to have been one of the most powerful factors in solving, in a peaceable manner, some of the most difficult social problems of our times.

Future successes lie in the hands of well-trained intellects, evenly-balanced minds, and loyalty to principles. Co-operation, as a whole, has long possessed the two latter qualifications, but she needs to graft on to them the former. Within herself lies the power of her own greatness. She has but to make her members what they should be and her triumph is won. Men and women are, to a certain extent, the creatures of circumstances, and it depends in no small degree upon their surroundings and opportunities as to what their present and their future will be. Co-operators generally are amongst the most prudent, self-denying, and thoughtful of the community, and amongst their ranks is to be found a vast amount of natural intelligence, which only needs to be developed. Many men and women of this stamp merely require the opportunity in order to seize it and turn it to good account. Each society should take care to utilise for its own advantage all such minds within its own circle, and should do its best to guard its members from gross companionships and evil habits by supplying them with the higher and more ennobling attractions of intellectual pleasures and educational pursuits.

For these objects co-operators should steadily labour in their several societies, avoiding on the one hand the rest-and-be-thankful spirit, and not becoming disheartened on the other because their fellow-members do not always see eye to eye with them the importance of education. All great results which benefit society are but questions of time, labour, and patience. If we live to see the fruits of our toil, let us be thankful. If we do not, let us rest equally satisfied with the knowledge that we have sown good seed, which is certain, sooner or later, to produce an abundant harvest for man's good.



## NATIONAL EXPENDITURE ACCOUNTS AND AUDIT.

BY W. E. SNELL.

SIR ARTHUR HELPS, with genial combativeness, maintained, in spite of proverbial moralisings, that it is right to be generous with other people's money. Superficially there is some resemblance between this opinion and that which was given by Mr. Grant Duff at Elgin in 1868, viz., that nothing of the slightest importance can be done by "mere nibbling at the Estimates in Committee of Supply." But this resemblance does not go far, since Mr. Duff was eagerly desirous of promoting retrenchment, and by no means wished to sanction all the contents of the Estimates. Mr. Gladstone, in the Edinburgh Corn Exchange (1879), laid down three general principles of finance—(1), Economy of detail (which must imply thorough inspection and audit); (2), an Annual Budget, in which everything should be fairly stated in as complete a form as possible; and (3), Sir Robert Peel's doctrine, that annual loans are "a miserable expedient." Here nibbling at the Estimates is quite distinctly recognised by the master of modern finance, and if Mr. Grant Duff has seen no result from this procedure, it is because the "Committee of the whole House" is far too unwieldy to do our financial business. Sir Arthur Helps' meaning is far from being absurd, though more suitable to private than to public relationships. A generous confidence between principal and subordinate is very appropriate when friendship exists between the individuals; but in public life the best we can hope for is a smoothly-running machine, whose workings are unaffected by sympathy.

As regards the Estimates, it is assuredly not "nibbling" that we require, but a thorough and well-judged plan of retrenchment, such as the Committee of Supply is not likely even to suggest, much less to carry out. Perhaps we shall learn some day that, not only with reference to finance, but also in the work of legislation, the "Committee of the whole House" is a costly farce.

## A YEAR'S CHARGES.

WITHIN the space here at our disposal, it would be absurd to attempt anything like a detailed analysis of our National Expenditure; nevertheless it will be desirable to keep before us a distinct sketch of our principal outgoings. The following figures are almost identical with those given in the Finance Accounts for 1886-7.

|                                    | £          | s. | d. | £          | s. | d. |
|------------------------------------|------------|----|----|------------|----|----|
| Interest and Management of Debt .. | 19,151,476 | 14 | 7  |            |    |    |
| Terminable Annuities .....         | 8,214,890  | 5  | 0  |            |    |    |
| Interest on Local Loans .....      | 377,711    | 15 | 10 |            |    |    |
| Suez Canal Bonds .....             | 199,944    | 0  | 0  |            |    |    |
| Cape Railway Bonds .....           | 14,000     | 0  | 0  |            |    |    |
|                                    | <hr/>      |    |    | 27,958,022 | 15 | 5  |

## NATIONAL EXPENDITURE ACCOUNTS AND AUDIT.

A YEAR'S CHARGES.—*Continued.*

|                                        | £           | s. | d. | £          | s. | d. |
|----------------------------------------|-------------|----|----|------------|----|----|
| <i>Brought forward....</i>             |             |    |    | 27,958,022 | 15 | 5  |
| Civil List .....                       | 410,065     | 8  | 2  |            |    |    |
| Annuities and Pensions .....           | 345,517     | 14 | 0  |            |    |    |
| Salaries and Allowances .....          | 89,182      | 12 | 0  |            |    |    |
| Courts of Justice .....                | 500,431     | 9  | 8  |            |    |    |
| Miscellaneous Services .....           | 398,694     | 6  | 6  |            |    |    |
|                                        |             |    |    | 1,743,891  | 10 | 4  |
| Army .....                             | 18,429,271  | 15 | 9  |            |    |    |
| Navy .....                             | 13,265,401  | 8  | 4  |            |    |    |
|                                        |             |    |    | 31,694,673 | 4  | 1  |
| Public Works and Buildings .....       | 1,830,063   | 13 | 5  |            |    |    |
| Civil Departments .....                | 2,427,910   | 5  | 4  |            |    |    |
| Law and Justice .....                  | 6,180,084   | 7  | 5  |            |    |    |
| Education, Science, and Art .....      | 5,472,417   | 7  | 11 |            |    |    |
| Foreign and Colonial Services .....    | 617,016     | 19 | 2  |            |    |    |
| Superannuations, &c. ....              | 1,233,012   | 17 | 9  |            |    |    |
| Miscellaneous Charges.....             | 65,948      | 5  | 9  |            |    |    |
|                                        |             |    |    | 17,826,453 | 16 | 9  |
| Collection of Customs .....            | 949,216     | 4  | 3  |            |    |    |
| „ Inland Revenue.....                  | 1,727,702   | 2  | 3  |            |    |    |
|                                        |             |    |    | 2,676,918  | 6  | 6  |
| Post-office .....                      | 5,436,892   | 9  | 2  |            |    |    |
| Telegraphs.....                        | 1,935,000   | 0  | 0  |            |    |    |
| Post-office Packets .....              | 724,900     | 0  | 0  |            |    |    |
|                                        |             |    |    | 8,096,792  | 9  | 2  |
| Management of Crown Lands .....        |             |    |    | 97,123     | 16 | 3  |
| Total Ordinary Expenditure 1886-7..... | £90,093,875 | 18 | 6  |            |    |    |

This grand total being considerably higher than the Budget Estimate of the expenditure for 1887-8, a word or two of explanation may be serviceable. In the first place the outlays connected with Crown lands are never shown in public accounts as a spending branch, the cost of collection being simply deducted from the gross revenue on its way to the Exchequer. Secondly, the sum of £1,744,079 is to be diverted during the coming year from the service of the debt to the relief of the taxpayer. Deducting, therefore, these items from the actual expenditure of 1886-7, we find that a net reduction of £406,379 was anticipated by the Chancellor of the Exchequer.

|                                |             |
|--------------------------------|-------------|
| Expenditure for 1886-7 .....   | £90,093,876 |
| Crown Lands.....               | £97,124     |
| Saving on Debt .....           | 1,744,079   |
|                                | 1,841,203   |
|                                | 88,252,673  |
| Net reduction of charges ..... | 406,379     |
| Estimate 1887-8 .....          | £87,846,294 |



## NATIONAL EXPENDITURE ACCOUNTS AND AUDIT.

Further, lest the mere magnitude of these huge totals should be too oppressive, let us make the deductions necessary for showing the actual cost which is met out of the National taxation. Some fourteen millions-and-a-half of revenue are derived from the Post-office and other sources, quite separate from taxation; and, on the other hand, the gross expenditure, as shown in the Estimates, may be held to include the fees and other receipts which it is the means of earning.

Thus the real amount raised in 1886-7 by taxation proper was..£76,115,000

The net expenditure, after allowing for receipts..... 75,340,000

Showing a surplus of ..... £775,000

## HER MAJESTY'S CIVIL LIST.

At the commencement of each reign, by a practice which has obtained since the Revolution, a *quasi* bargain is entered into with the new Sovereign whereby in return for the surrender of the Crown Lands a Civil List, or Life Annuity, is granted to meet certain outlays deemed to be necessary for maintaining the personal dignity of the Crown. Such at least appears to be the object aimed at by the present arrangement, although formerly many charges of a strictly business character were borne upon the Civil List which are now directly defrayed from the Consolidated Fund. For example, the maintenance of junior branches of Royalty, many official pensions, and certain judicial and diplomatic salaries have been thus transferred—with the result, perhaps not greatly to be wondered at, of producing a marked increase in their amount.

It has been argued that the maintenance of the whole of the Royal Family was actually contemplated in 1837 as a prospective burden upon Her Majesty's allotted income; but this is a controversial issue on which we need not enter. Suffice it to point out that the very idea of a bargain with the Sovereign bears an unconstitutional aspect; and if, as many instances prove, the nation would be responsible for any excesses, it seems to follow that any savings should be paid over to the National Exchequer. This, however, is notoriously contrary to practice. Any saving that may arise, except on Class V., is transferred to Her Majesty's Privy Purse (Class I.). Class V. consists of pensions which are granted by Her Majesty to the amount of £1,200 a year, and the original actuarial estimate was that this would be equivalent to an annuity of £19,871. This calculation has proved very misleading, the average annual amount over a period of twenty years having been £22,197. For obvious reasons there could be no claim on the part of the Privy Purse to any "savings" under this head; nor is there any difficulty in understanding that the Pension Account requires to be submitted for the Auditor General's examination. The other classes of the "List," excepting, of course, Class I., pass through the hands of a Treasury official, known as the Auditor of the Civil List; but it cannot be supposed that this officer's functions possess great importance from the public point of view. In the very improbable contingency of an excess of charges on Classes II., III., and IV. (after allowing for a reserve fund of £15,000), it would be the duty of the Auditor, in terms of the 10th section of the Act 1 and 2 Vic., cap. 2, to report the

fact to Parliament within thirty days. Even here it will be seen that he would be acting quite as much in the interests of the Sovereign as on behalf of the public, while his ordinary duties must tend simply to guard Her Majesty against any irregularity on the part of her household officers. It will be remembered that some years ago Sir Charles Dilke caused no little excitement by agitating the constitutional question whether Her Majesty could appropriate savings out of the allowances granted for maintaining the various branches of the Royal Household.

The settlement of the Civil List at the beginning of the present reign was based on the actual expenditure of King William IV. during the year 1836. For example, the disbursements of the Lord Chamberlain's department, exclusive of salaries, amounted to £41,898, including £11,381 for upholstery, £4,119 for ironmongery, £1,957 for medical charges, &c., &c. Accordingly, £42,000 in round figures was the annual amount assigned to Her Majesty under this head, although the expenditure of such a sum would be an almost irksome task. As we have seen, however, economy is not prohibited, and any savings which may result are transferred to the Privy Purse.

Again, the expenses of the department of the Master of the Horse in 1836 amounted to £38,205, including £6,208 for liveries, £4,125 for carriages; and this amount, or rather about £1,000 a year more, has been continuously paid ever since. On the whole, however, it must be admitted that some reduction was effected on the Tradesmen's Bills, £172,500 being allowed to Her Majesty, as against £174,048 expended in 1836. But this abatement is abundantly counterbalanced by the quaint-looking items contained in Classes IV. and VI. of the Civil List, viz., £13,200 for Royal Bounty, Alms, and Special Services, together with £8,040 of "unappropriated money."

That large savings may be effected on Civil List expenditure a very brief consideration will convince us. Class II.—Salaries and Retired Allowances of the Royal Household—includes provision for a crowd of officials of very doubtful utility. For example—when we find that the Royal Household requires a "Lord Steward," a "Treasurer," a "Comptroller," and a "Master," who are all titled personages enjoying large salaries, we may make a tolerably shrewd guess that the real work (if any) will devolve on the "Superintendent"—a fifth official, whose remuneration is somewhat smaller. An outsider might also fear lest some confusion should arise respecting the duties of Bedchamber "Ladies," Bedchamber "Women," and Maids of Honour, also of Lords and Grooms in Waiting, various kinds of Ushers, Pages of the Back Stairs, Pages of Honour, and Pages of the Presence. No doubt if Her Majesty's private opinion could be ascertained it would be found that she attaches no importance to the maintenance of a long list of sinecure offices, for surely it is the falsest of false sentiment, however common the idea may have been in mediæval courts, that there can be any access of dignity to a Sovereign by surrounding her with a crowd of idlers. Be it observed further that under present arrangements Her Majesty's personal interest would suggest the abolition or suspension of some of these numerous offices, since all savings which may arise find their way to the Privy Purse. The whole question will, however, come up for consideration on the accession of the next Sovereign, and we can hardly doubt that while nothing will be lacking



## NATIONAL EXPENDITURE. ACCOUNTS AND AUDIT.

that can be deemed necessary for maintaining the dignity of the Chief Magistrate of the Nation, some precautions will be taken against the renewal of the wasteful and absurd arrangements which have hitherto prevailed.

## ROYAL ANNUITIES.

THE allowances granted to members of the Royal Family for maintenance of the Royal dignity are of course quite independent of the Civil List, being issued from a separate branch of the Consolidated Fund, known as "Annuities and Pensions." It will be convenient, however, to bring together into one statement the whole cost of the Royal Family, including the salaries of those holding public appointments. The fifth class of the Civil List may be excluded, as it consists entirely of pensions which are paid in most cases to very deserving persons having no strictly legal claim on public funds. The pensions of the servants of deceased Sovereigns are also excluded, though, it must be confessed, on narrower grounds.

| Her Majesty's Civil List, excluding pensions above-mentioned ..... | £       | £        |
|--------------------------------------------------------------------|---------|----------|
| Estimated Revenues of the Duchy of Lancaster .....                 | 385,000 |          |
| Expenditure on Royal Palaces (excluding Parks) .....               | 50,000  |          |
| "    "    Yachts .....                                             | 35,249  |          |
| "    "    Escort and Salutes .....                                 | 34,656  |          |
|                                                                    | 36,226  | 541,131  |
| Annuity of the Prince of Wales .....                               | 40,000  |          |
| Estimated Revenues of Duchy of Cornwall .....                      | 64,641  |          |
| Salary as Colonel of Hussars .....                                 | 1,350   |          |
| Repairs on Marlborough House .....                                 | 2,120   |          |
| Annuity of Princess of Wales .....                                 | 10,000  |          |
|                                                                    |         | 118,111  |
| Annuities of other members of Royal Family .....                   |         | 108,000  |
| Salaries                      "                      " .....       |         | 22,681   |
| Annual Total .....                                                 |         | £789,923 |

## AUDIT.

THE present system of National Auditing dates from 1867, when the offices of Comptroller General of the Exchequer and of the Commissioners for auditing the Public Accounts were conjoined to form what is now known as the "Exchequer and Audit Department." In 1875 a branch office was instituted for the purpose of dealing with Chancery Funds, and in 1876 and 1878 respectively, the accounts of the War Office and the Admiralty were partially included within the scope of the department by the institution of a "Test Audit"—a peculiar arrangement which will call for some further consideration.

The independent status of the heads of the Audit Office is secured by a provision in the Act of 1867 that they shall not be removable except on an address from the two Houses of Parliament, and that their salaries (£2,000 and £1,500 per annum) are payable direct from the Consolidated Fund in the same manner as those of Her Majesty's Judges.

## NATIONAL EXPENDITURE ACCOUNTS AND AUDIT.

The chief duty of the Auditor General, as representing the House of Commons, is to check the faithfulness of the "appropriation" of public funds to the service of a particular year. With this view he is always entitled to bring before the notice of Parliament any opinions he may form as to the way in which Government Accountants discharge their duties. Especially is he held obliged to report any cases in which (1) there has been any failure to vouch for payments to his satisfaction; (2) a payment appears to have been charged against the wrong account, or to have been incurred at an improper time; (3) the grant approved by Parliament has been exceeded; or (4) amounts received by the accountant have not been legally dealt with.

The stringency of these regulations, however, is to a large extent illusory, since the total grant for a service is far from being subjected in the Audit Office to the most complete analysis. The Army Grant, for example, is divided into several votes, and each vote is restricted to its special service. But each vote is also separated into many subheads, of which the auditor takes no cognisance. Hence the War Office authorities are practically at liberty to overstep their nominal limits in regard to any subhead if only they can effect in some other direction a corresponding retrenchment. A similar independence on the part of the "great spending departments" is always observable in the management of a Vote of Credit. Whenever, by reason of unusual political complications, the House of Commons finds itself obliged to pass a special grant with a view to military precautions, the War Office and Admiralty seize upon this additional grant as an unconditional supplement to their ordinary funds, regarding it, in the words of the Auditor General, "too much in the light of a sum placed at their disposal by Parliament to meet any expenditure unprovided for in the ordinary votes which in a time of emergency it might seem desirable to incur, irrespective of clear or direct connection with the 'special preparations.'"

The Public Accounts Committee (1887) very properly condemn this tendency, and adopt the view of the Committees of 1879 and 1880, that "however wide may be the terms of the Vote of Credit, the charge against it must not exceed the aggregate of the sums which the spending departments can identify as directly occasioned by or for the event or object to meet which the vote has been taken." It must, however, be admitted that a hard-and-fast line cannot well be drawn. There is clearly room for discussion in the rule proposed by the Auditor General, that "the expenditure should relate to the special preparations, and that it should have been ordered *before the danger of war was virtually at an end.*" Moreover, it must often happen that one step in the direction of enlarged outlays implies other strictly consequential measures, without which the previous expenditure would be rendered abortive.

It was not until 1868 that serious attention was given to the lack of any independent audit for Army and Navy Services. The matter was then referred to by the Public Accounts Committee as one which urgently called for the consideration of Parliament and the Treasury. Similar observations were made in 1869, 1871, 1872, and 1874, and finally this importunity overcame the inertia of officialism—the device of a Test Audit being adopted in 1876 as the simplest plan of giving a guarantee of faithful expenditure, without incurring serious additional outlay. By



## NATIONAL EXPENDITURE ACCOUNTS AND AUDIT.

this plan the different branches of the accounts come under surveillance in succession, the order of selection being settled more or less by chance. In 1878 a similar method was initiated at the Admiralty.

It is not, however, admitted by the authorities that this is the only real check imposed on the expenditure. As Mr. Knox, of the War Office, informed the Select Committee, the whole spendings of the department come within the purview of the Auditor General so far as general "appropriation" is concerned—that is, a broad and general check is applied in order to prevent any serious misapplication of money included in one vote to the purpose of another vote which is totally distinct. But, as we have indicated, there are within the limits of each vote many various branches, the proper separation of which is not ensured in any way. Next comes the Test Audit, in which, to quote again the words of Mr. Knox, the auditor applies to the detailed accounts "*exactly the same examination as we apply to them.*" When Mr. Knox was under examination, votes amounting to £8,000,000 had to be omitted, because they "lie outside of the financial control" of the so-called Accountant General. This large expenditure is audited in various departments of the War Office; that is, said Lord Randolph Churchill, "the department which expends the £8,000,000 audits the expenditure." Here we are presented with a somewhat awkward dilemma. We must, it appears, either have two expensive staffs applying to the accounts "exactly the same examination," or we must be content to leave the audit in the hands of those who "administer the expenditure."

Only a partial check is applied to the charge side of the books of the Revenue Departments, but the discharge is completely examined. The proper audit of the income of the Revenue Departments would imply regular visits of inspection to all the ports where customs are levied, and to the Dublin and Edinburgh offices with respect to stamps and taxes.

The Civil Service Votes are strictly supervised by the Treasury, and the Audit Department is directed to report to them any deviation, however slight, from the appropriation described in the Estimates. It cannot be doubted that some such rule will be applied uniformly so soon as Parliament finds itself able to give a real supervision to the national finances.

## SECRET SERVICE MONEY.

As is well known, the considerable outlay which passes under the suspicious title of Secret Service Money has of late years been the subject of much Parliamentary discussion. The theory of such a fund is that both at home and abroad the Government requires to be on the outlook for certain kinds of news which cannot be openly sought. This theory, however, has not been always acted upon in the past. One public official tells us how, at the close of the Parliamentary session, he conveyed "in a squeeze of the hand" bundles of bank notes, varying from £500 to £800, to each of the supporters of the Government. Under Lord Bute's administration, the sum of £80,000 was spent in bribes in order to secure the enactment of a single measure. "Nothing else," said his lordship's secretary, "could have

## NATIONAL EXPENDITURE ACCOUNTS AND AUDIT.

surmounted the difficulty." Sir Robert Walpole's method, also, is sufficiently well known. He was reported by a Select Committee as having spent £50,000 for pamphlets in support of his measures.

The theory of public service is not believed to hold good to any extent in regard to that portion of the Secret Service Money which, up to 1886, was derived from the Consolidated Fund. This amounted to £10,000 a year, and was paid quarterly to the Patronage Secretary of the Treasury on his mere receipt. Whether it was actually applied to any purpose of public utility or not, the impression universally prevailed that it served chiefly to promote the party interests of the Ministers in office for the time being. This theory is supported by the significant fact that by the Act 50 Vict., c. 2, the charge was abolished, and the half-year's allowance of £5,000, shown in the Finance Accounts for 1886-7, will be the last of these most objectionable disbursements.

We presume that there is no danger of the diversion to similar purposes of any part of the annual Vote for Secret Service, but it is worth notice that the estimate of this Vote is maintained at £50,000, although, by the admission of its administrators, a much smaller amount would suffice. This Vote is supposed to be chiefly devoted to the interests of the Foreign Office and the department of the Secretary for Ireland. From 1870 to 1884, this Vote, as presented to Parliament, was steadily reduced from £27,000 to £23,000, but it must be understood that very frequently a large part of the grant was unexpended, and was consequently surrendered to the Exchequer. Thus in thirteen years about £90,000 was repaid out of a series of votes amounting to £310,000. Strange as it may appear, this downward tendency received a check, the vote for 1884-5 being £33,000, and subsequent votes £50,000 per annum. The actual expenditure for 1885-6 (excluding the Consolidated Fund payment of £10,000) amounted to £43,047. 11s. 11d., and that for 1886-7 to £33,547. 11s. 11d.

Grants for Secret Service are from their nature not susceptible of anything worth the name of audit. The Public Accounts Committee (1887) considered that Parliament did not expect any further verification of the transactions than "the personal assurance of the responsible Ministers of the Crown who are entrusted with the expenditure of the Vote that the money has been properly spent." Almost all that is known of the application of the money is that since the vigorous protests of Mr. Peter Rylands, sixteen years ago, no official salaries or pensions are augmented from this source. It may be anticipated that a growing dislike will manifest itself to this continued withdrawal of public expenditure from the control of public opinion and official audit, and before very long the House of Commons may demand from the Government an assurance that no part of the Secret Service Money is employed within the United Kingdom on matters of domestic concern. In the sphere of foreign policy, however, the Executive will make a strong fight against any change, pointing to the necessary contact of our representatives with emissaries of foreign powers who have ample funds at command.



## COMMITTEE OF SUPPLY.

No one will deny that the House of Commons fails at present to come to close quarters with the problem of retrenchment. The so-called discussion of the Estimates is a perfect scandal, even to many who have only the vaguest notion of what is required. The ordinary newspaper reader observes that "Supply" is postponed again and again, until at last Ministers come down to the House and declare that they can wait no longer; unless money is forthcoming, with or without discussion, the Queen's Government cannot be carried on. Then a rush is made at the interesting task of voting supplies. Several millions may be disposed of without remark, but at last someone rises and delivers a plausible and, apparently, well-considered speech, which goes to show that a certain item about to be granted will be useless or mischievous. From the Ministerial Bench there next proceeds a perfunctory reply, emanating probably from an official who knows far less of the matter in hand than does the objector. The latter has studied the subject *con amore*, either for the sake of scoring a point, or from a real interest in the business involved. The Minister is content to rely on the ample documentary support put into his hands by his clerks, though it frequently happens, if we may judge from appearances, that he has not taken time to "study his brief." He has a majority, however, at his beck, and therefore his critic is fain to comply with the official suggestion that he should content himself with a simple protest, or to accept the official assurance that a full inquiry shall be made into the circumstances. Here is very little satisfaction either for the newspaper reader or for his representative in the House. But a still more glaring proof of mismanagement—conspicuous even on the most superficial glance—is furnished in the practice of passing Votes on Account. It might be difficult to indicate specific mischief arising from this course, and it is even credible that its abandonment would not secure any better control of the public expenditure; but at best this were simply to show that it is a farce rather than a scandal. The new year begins on April 6th, and, theoretically at least, the "Queen's Government" begins to need money on that day. Certainly funds are needed and expended for the service of the new year within a month of its commencement. Yet it is a notorious fact that discussions in Supply are going on in August, and even in September, and the bridge by which the Government contrive to cross the interval of four months is a series of Votes on Account. The House is assuredly not obliged to pass such votes without consideration, but according to the hypothesis on which the whole transaction is based, there is as yet no time for discussion, and if determined opposition were offered, the vote would presumably be withdrawn. In that case the Treasury would use their own discretion and apply afterwards for an Act of Indemnity. "Never put off till to-morrow what you can do to-day" is the advice of a well-known proverb; but Ministers will give no heed to proverbial wisdom, if by "putting off" they can only weary their opponents and squeeze through the votes with a minimum of talk. What passes unnoticed in sultry August might be fiercely debated should an opportunity occur in March. The only real check imposed on the Government in bringing forward these votes is the rule that no novelty shall be introduced to the House in that way. Mr. Childers, in 1866, said "it was understood that a Vote on

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Account should involve no new principle," but practically it will be seen that this amounts to no check at all. Of late years the Votes on Account have been three in number, *i.e.*, three instalments of the year's grant for each particular service have been voted without discussion, and on a fourth occasion the balance has been formally considered. Three examples will show that the sums involved are very considerable, the following being the Votes on Account for Civil Services alone :—

|               |            |
|---------------|------------|
| 1881-82 ..... | £6,457,150 |
| 1882-83 ..... | 5,316,600  |
| 1883-84 ..... | 5,486,320  |

What decent excuse can be imagined for thus evading the just and proper inquiry of Parliament? Plain common sense would teach us that if on the present system the grants of money receive due consideration, no time would be wasted by giving them the same consideration in February or March. As it is, the most objectionable item in any particular vote may have been spent in April in pursuance of a "Vote on Account," and thus the debate which comes on in August may be rendered abortive. Finance is so important a topic that none could object to giving it a foremost place, especially considering that the present system compromises the dignity of Parliament, and involves the risk of misappropriation. It should be an absolute rule that before money is spent the House should fully understand and approve the purpose to which it is to be applied.

To this end it is desirable that the Estimates should be arranged as clearly and as logically as possible. It is deplorable to find the officer responsible for the Army Estimates confessing that he could not suppose the documents to be intelligible to the average member of Parliament. An incidental reform applicable to the Civil Estimates would be to include in them, as Mr. A. J. Wilson suggests, all first charges on revenue except interest and management of debt, and the Crown's Civil List. These payments, which are now made by statutory authority directly out of the Consolidated Fund, are often closely akin to charges on the votes, and it would be an obvious convenience if they were all brought into one view. This proposal is to be brought before the House of Commons during the session of 1888.

## METHODS OF INVESTIGATION.

WE are now brought to the inquiry whether the House can fairly be expected to grapple effectively with the whole subject of finance, and if not, whether any contrivance is possible whereby it might be enabled to do so. If no systematic retrenchment is now being attempted, it is not because nothing is known which would justify such a course. Many facts of the greatest significance have been elicited from time to time by numerous committees, and forthwith buried for ever in some massive blue book. Our only hope for reform lies in the establishment of some such committee as a permanent institution. The members of Parliament who with infinite pains and assiduity have probed the weak places of a public department should be entitled and expected to return to the charge without loss of time, in order to be satisfied that their previous exertions have not been fruitless. To appoint an entirely fresh committee after the lapse of several years is mere trifling, since the



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new members are compelled to move cautiously, so long as they have not mastered the minutiae of the business. It would be most unjust to attribute inefficiency, as a rule, to the members of such committees.

## ARMY ACCOUNTS.

TAKE the Inquiry of 1887 into the Estimates for the Army and Navy. This Inquiry was presided over by Lord Randolph Churchill, and arose out of his lordship's resignation of the office of Chancellor of the Exchequer. No Old Bailey practitioner could badger a reluctant witness more pitilessly, or show less remorse, than did Lord Randolph in his treatment of Mr. Knox, the Accountant General of the War Office. If such a ruthless examination were perseveringly followed up the public would soon insist on sweeping reforms. The Public Accounts Committee does good work in its very restricted sphere, but its functions are merely technical, and never go near to the roots of an evil. It deals merely with formal accounting and with closed accounts, whereas the necessary work lies in the reopening of new accounts by presenting the estimate of a new year. Let these Estimates be thoroughly analysed year after year by a committee which is permanent, so far as electoral mutations permit; let the debatable points be fully explained by the officials concerned, and, if necessary, let the actual working of the department be inspected by the committee. After a few years there would be some M.P.'s to whom the whole ramifications of the departments would be familiar, and by whom any wasteful expenditure could readily be checked.

We may venture to cite a few examples of facts which have long been known without leading to any result. Possibly their republication by Lord Randolph's committee will be equally futile.

This committee held, during 1887, eighteen long sittings, but found themselves able to take evidence on only sixteen out of the twenty-five Army Votes, while the Navy Accounts were not dealt with at all. That the committee fully appreciate the arduous nature of their task is sufficiently shown by their appointment of two professional accountants to conduct an independent audit of some of the Army Accounts, and also by the fact that they strongly recommend their own reappointment *as soon* after the commencement of next session *as possible*.

Meantime much interesting information has been published or republished which cannot at present be fully realised by the public. The Army Pay Department, for example, which costs upwards of £118,000 a year, appears to be a complete network of anomalies. In the first place, the actual work of paying the men is not done by the Paymaster, but by the Captain, the Paymaster merely keeping and transmitting the accounts. The salaries of the Paymasters vary from £315 to £738 per annum. The Staff Paymasters, who are distinguished from the Regimental Paymasters by being attached to districts, have to pay the Militia and the Reserves; but it is frankly admitted by the Accountant General that this work could be equally well done by the War Office directly. The mode of paying the officers is still more clumsy and wasteful. The total amount due to the officers of each regiment is handed over by Government in a lump sum to the regiment's "agents" or bankers, by whom it is credited to each officer's account. Now, if the officers were called

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upon to pay to the agents a small fee for this service it might not be considered unreasonable, although it must be remembered that the agents have the benefit of the free use of a large continuous balance. Mr. Henry Fowler, M.P., suggested 5s. per cent per annum as the highest charge which an English bank would be likely to make in such a case; but, as a matter of fact, the rate is more than 30s., and the total charge, amounting to £21,000 a year, *is paid by the nation*. For this amazing absurdity the only apology is that when "agency" was introduced, the officers submitted to some reduction in their emoluments on account of the convenience afforded them.

The Judge Advocate General—so-called because he is neither a judge, an advocate, nor a general—is the ornamental head of an office which revises the proceedings of courts martial. The official justification for the retention of this office is that a constitutional question is involved, and that a Parliamentary officer is required. The first excuse is somewhat nebulous, and, as for the second, it may be admitted that the Government is sometimes strengthened by having this placeman at call, although it does not follow that the Government should buy him at his own valuation.

Another fine specimen of red-tape was graphically described in a question by Col. Nolan (Question 3,207). "A man has to surrender his old cap at the end of the year, and sooner than keep the old rag tossing about the barrack room for four or five months, he prefers to pay you a farthing, and you have to enter that up first by the Paymaster, and then by the clerks at the War Office, and then by the Paymaster-General's Office?" To all of which Mr. Knox was obliged to say, "That is so." "Take care of the pence" says the proverb, "and the pounds will take care of themselves;" but this will hardly warrant us in spending threepence that a penny may be taken care of.

In order to ascertain fully what scope there may be for "retrenchment and reform" in army administration, we may reasonably institute a comparison between our own statistics and those of foreign nations. The result, as presented in the following table, is sufficiently startling, especially as no credit is given to the foreign States mentioned for their elastic methods of mobilisation in the event of war:—

| Country.                                                         | Cost of Army.        | Numbers on Peace footing. |
|------------------------------------------------------------------|----------------------|---------------------------|
| Germany .....                                                    | 19 millions sterling | 420,000                   |
| France .....                                                     | 23            ,,     | 500,000                   |
| Italy.....                                                       | 7½           ,,      | 200,000                   |
| Austria-Hungary .....                                            | 14           ,,      | 270,000                   |
| Russia.....                                                      | 19           ,,      | 800,000                   |
| United Kingdom and India (excluding Militia and Volunteers) .... | 33½   ,,             | 251,000                   |

We shrink from attempting to penetrate the mystery of "half-pay," or to estimate the proportion of officers which an army requires. But we may safely refuse to be content with such generalities as are indulged in by Mr. Knox when dealing with the salaries of the Head Quarter Staff. "The duties attaching to the management of a volunteer army are," in his opinion, "very much more extensive than those



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attaching to a conscript army ; ” but this hardly explains why the Duke of Cambridge should receive £6,564 per annum as British Commander-in-Chief and honorary Colonel of the Guards, while Count Von Moltke, the greatest soldier in the world, is content with £1,600 and an official residence. We must not, however, omit to mention that the Duke’s successor is to be *limited* to £4,500, while the future Adjutant-General will receive £2,700 instead of £3,000.

## WAR MATERIAL.

THE conduct of the Arabs of the Soudan in recklessly rushing upon the British bayonets—a piece of audacity which seems to have been scarcely expected—led to an Official Inquiry into the system by which warlike stores are passed for Her Majesty’s service. The Report of this Commission—said to be the work of Mr. Justice Stephen—demands some very sweeping reforms ; and as we are warranted in assuming that, pending these reforms, public money has been and is being wasted, some allusion to the Inquiry will not be out of place in such an article as the present.

Incidentally, the Commissioners elicited a few examples of “red tape,” or something worse, of which one specimen will suffice here. Commissary General Molony (Question 6,581) stated that quite recently the old fashion of carrying water bottles by means of shoulder straps had been resumed. At what cost this change was effected he did not mention, but only about four years previously £8,000 was spent in introducing the system of attaching the bottles by a catch, or spring, to the belt. In four years more some inventive genius will possibly show us how another £8,000 may be squandered.

The gist of the Commission’s Report is that there is an utter want of unity and responsibility in the War Department. As for the Secretary of State, “it is morally and physically impossible that any one man should discharge his functions in a satisfactory manner.” Both the Secretary of State and the Surveyor of the Ordnance “are practically in the hands of their subordinates.” Hence the central recommendation is that the old office of Master-General of the Ordnance should be revived and given to “a military man of the greatest ability and eminence, the widest experience of active warfare, and the highest authority.” He should, in order to exercise a permanent influence on his department, hold office for some such definite period as seven years ; and then with the help of some necessary changes of detail we may hope for “more system, more publicity, more vigour in administration, and more special knowledge in council.” But here we are confronted with a curious difficulty which arises at every turn to check the progress of the administrative reformer.

While giving their recommendation with every confidence, the Commissioners have to confess that it is at variance with the principles of party government, and therefore is very unlikely to be frankly adopted, or to receive a fair trial. The high officers of State are selected not for efficiency, but for their political opinions, and their dexterity in maintaining them. The members of a government are expected to think alike, and when their speech or conduct is strongly disapproved by the House of Commons they stand condemned together, notwithstanding that many

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departments of the State may be receiving most careful guidance. If this rule is not to continue absolute, it might as well be entirely abandoned. It is not probable that one high official will be allowed the privilege of continuing in office, without reference to political contingencies, either for a fixed term or during good behaviour.

Lord Wolseley, another high authority, urges that promotion by merit should, if possible, be removed from the sphere of party. So in the general administration of the army, he maintains that great waste occurs owing to the dominance of new theories. "No attempt has ever been made," he complains, "to specify and to fix definitely, with the authority of Parliament, the national objects for which our army is required."

## THE DEBT.

THE National Debt, which has been truly termed "a mortgage on the labour of the people," is by far the largest branch of the public expenditure, absorbing in 1886-7 nearly  $36\frac{3}{4}$  per cent of the whole sum of our taxation.

The capital of the Debt stood at March 31, 1887, as follows:—

|                                                                      |              |    |    |
|----------------------------------------------------------------------|--------------|----|----|
| Funded Debt .....                                                    | £637,637,640 | 9  | 11 |
| Unfunded ,, .....                                                    | 17,517,900   | 0  | 0  |
| Estimated Capital of the Terminable Annuities, at<br>3 per cent..... | 81,123,148   | 0  | 0  |
| The grand total of the Nominal Debt being .....                      | 736,278,688  | 9  | 11 |
| Showing, as compared with that of 1886.....                          | 742,282,410  | 12 | 10 |
| A decrease of .....                                                  | 6,003,722    | 2  | 11 |

Which may be thus classified—

|                                |            |   |    |
|--------------------------------|------------|---|----|
| Funded Debt .....              | £1,212,053 | 2 | 11 |
| Unfunded ,, .....              | 1,800      | 0 | 0  |
| Terminable Annuities .....     | 4,706,769  | 0 | 0  |
| Suez Canal Bonds paid off..... | 83,100     | 0 | 0  |
|                                | £6,003,722 | 2 | 11 |

But in order to have an accurate view of the *real* as distinguished from the *nominal* indebtedness, we must first—

|                                                                                 |              |   |    |
|---------------------------------------------------------------------------------|--------------|---|----|
| Add to the above sum of .....                                                   | £736,278,688 | 9 | 11 |
| The amount of certain other liabilities practically<br>equivalent to debt ..... | 2,500,351    | 0 | 0  |
|                                                                                 | £738,779,039 | 9 | 11 |

And, secondly, deduct several substantial

|                                          |              |   |    |
|------------------------------------------|--------------|---|----|
| Assets, viz., Local Loans to be repaid.. | £26,349,613  |   |    |
| Nominal Value Suez Canal Shares .....    | 3,532,040    |   |    |
| Balances in Bank.....                    | 5,950,107    |   |    |
| Other Assets.....                        | 2,100,814    |   |    |
|                                          | 37,932,574   | 0 | 0  |
| Leaving a net total of .....             | £700,846,465 | 9 | 11 |



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There will probably not be two opinions as to the desirability of lightening the pressure of this enormous burden. Mr. Gladstone, in his Budget Statement of 1866, referred very solemnly to Mr. Jevons' treatise on our Coal Supply, and argued that, in view of the possibility of losing our commercial supremacy, we should employ our period of prosperity in diminishing our permanent burdens. Since that time the debt has been reduced by some eighty millions. But we cannot here discuss the policy of debt reduction, since it inevitably raises the far-reaching question of the equitable incidence of taxation. The community appears to shrink from assuming any greater burden than is absolutely necessary, and to view the reduction of the debt from the standpoint of the humourist who asked, "What has posterity ever done for us?" Hence, as Mr. Courtney slyly points out, the greatest financier is often the man who can most dexterously conceal from the public the nature of the measures he proposes. There is a curious solemnity in the machinery of the Terminable Annuities, and this solemnity leads the public to endure a burden which they might otherwise resent. Department A holds a certain amount of Government Stock (*e.g.*, people's savings) which Department B (National Debt Office) offers to buy in by certain periodical payments calculated so as to include both principal and interest.

Under this solemn compact the paying of the Debt was supposed to be inevitable, but in 1885 the operation was suspended for twelve months, and in the words of Mr. Courtney, "the sacredness of terminable annuities was gone for ever." In 1887, also, Mr. Goschen interposed a check on the Liquidation of the Debt, arguing that however desirable debt reduction might be, it would be grossly unjust to maintain the Income Tax at the abnormal rate of 8d. for that purpose. What the taxpayer may reasonably hope to see, considering the high price of Consols, is a further conversion of the 3 per cents into  $2\frac{1}{2}$  and  $2\frac{3}{4}$  per cents, as was proposed by Mr. Childers in 1884, when, unfortunately, political complications occurred which frustrated his plans. The two cognate questions of economical administration and just taxation—the latter a most thorny subject, the former very simple though vast in its dimensions—must have immediate attention from the constituencies, for nothing less than the overwhelming pressure of public opinion will give our Inquiry Commissions the necessary momentum for prostrating the obstacles which lie in their path.

## GRANTS IN AID.

A most significant illustration of the difficulties attending the problem of the Incidence of Taxation is found in the steady growth of Grants in Aid of Local Taxation. One of the most emphatic votes ever given by the House of Commons declared that "local" taxpayers were entitled to relief, and on, at least, one occasion, when Sir Stafford Northcote proposed extensive measures of this nature, he met with no opposition from the Liberal leaders. Yet, notwithstanding this apparent unanimity, there are on the surface grave reasons against the tendency to thus transfer burdens to the shoulders of the general taxpayer. Apart altogether from considerations of equity, there is danger that grants which come from an ever-flowing fountain in London will not be so carefully administered as rates which are levied

as well as spent in the locality. These grants appear to have grown from five to six millions during about six years, and the most serious items are as follows :—Nearly £700,000 for Pauper Lunatics, £1,714,000 for Pay and Clothing of Police, and £661,000 for Maintenance of Prisons, this last duty having been imposed on the Imperial Government by the great centralising measure of 1877.

#### PERPETUAL PENSIONS.

OF all our recent Inquiries connected with Finance, probably Mr. Bradlaugh's "Select Committee on Perpetual Pensions" has aroused the greatest popular interest; but now that the committee has reported it seems that we shall be somewhat late in locking the stable door. We are informed that since January, 1881, 330 pensions and allowances, amounting to £18,957. 9s. 6d., have been commuted by payment of £527,933. 18s. 4d., at rates varying from ten to thirty years' purchase. It is recommended, of course, "that all existing perpetual pensions, allowances, and payments, and all hereditary offices should be determined and abolished," and in all such cases the commutation should imply "a substantial saving to the nation."

The Duke of Grafton's Annuity of £6,870 was converted into £229,000 Consols, which again has been reduced to £30,555. 10s. 8d. by several purchases of land. Similarly the Duke of Richmond's £633,333. 6s. 9d. has all been invested in land excepting a nominal balance of £241. 12s. 5d. As a matter of curiosity a few lines may be quoted from the original Charter by which the latter of these grants was conferred. In this quaint and costly document it is declared by "CHARLES THE SECOND, by the Grace of God, King of England, Scotland, France, & Ireland, Defender of the Ffaith," that "Whereas, the Governors, Stewards, & Brethren of the fellowship of the Hostemen of the Town of Newcastle-upon-Tyne," did grant to the late Queen Elizabeth, "for each & every, & for such & so many Chaldrons of Sea Coals, Stone Coals, or Pit Coals of the Water Measure of Newcastle-upon-Tyne aforesd. as at any time or times thereafter should be sold, shipped, carried, or vended by any person or persons whatsoever forth or out of the Haven or River of Tyne belongg. to the aforesaid Town of Newcastle, to be spent within the Realm, & not transported beyond the seas the several sums of Twelvepence of lawful money of England. . . . Now Know Ye that We for the increase of the Revenue and the better support of the Honor and Dignity of our Right Trusty and Right entirely beloved son Charles, Duke of Richmond, & Lenox & the Heirs of his Body to be begotten and for want of such Issue for the better support of the Honor & Dignity of our Right Trusty & Right entirely beloved Cousin Louisa, Dutchess of Portsmouth," have granted to the said Duke the said sums of Twelvepence, &c., &c.

This narrative takes the mind back to the merry but corrupt times of the Restoration. How strange it seems that the whims and passions of such a monarch should to this very day, and indeed to practical perpetuity, impose a burden on the shoulders of the people of this country.



## RED TAPE.

THERE is still clinging round our Government offices a very marked separateness, akin to the intense bureaucratic officialism of Germany. It is quietly assumed that matters must be done by State officials in a different style from that which suits private men of business. To an outsider it would appear a very natural precaution to keep in every room of our vast piles of Government buildings some kind of inventory of furniture. Yet, it was only recently that such an "experiment" was even attempted, and then only in five offices. It is now stated that in four of these cases the inventory system has proved a failure—which appears to mean simply that wide discrepancies were found between the inventories and the actual contents of the rooms; and, so far as we can judge at present, this result, instead of provoking inquiry, seems to be regarded as a good excuse for doing nothing more.

## THE REMEDY.

IN a Democratic country we cannot be wrong in expecting the maximum of Parliamentary control. Our Army doubtless still suffers from the influence of the demoralising purchase system, whereby incompetent men were able to buy at the same time an official status and a public annuity. But much confusion and inefficiency (implying, of course, wasteful expenditure) is also due to the lack of Parliamentary control over the Army. The War Office authorities frankly confess that for them the opinion of the House of Commons means simply the utterances of the military members who may speak on the Estimates. There is scarcely, even in theory, and much less in practice, anything like real Parliamentary control. Increases of pay are granted in the same manner as the Purchase System was abolished, viz., by Royal Warrant, and this practice is admittedly inherited from the days when the Army was under the sole control of the Crown.

Mr. A. J. Wilson forcibly sums up the situation by declaring that Parliamentary control of expenditure fails "in the mastery of details, the grasp of the proportions of things, and the general absence of knowledge of departmental requirements." But if we endorse this sweeping indictment we are necessarily precluded from adopting Mr. Wilson's pleasant conclusion, that *perhaps it is enough* that the Public Accounts Committee renders flagrant abuses impossible. We refuse to content ourselves with the prevention of "flagrant abuses," and at the same time we deny that the committee does prevent them. The committee gives efficient support to the Auditor General in his criticism of the mere accounting of public departments. It is not his duty, however, to ask whether an office is overmanned, whether highly-paid officials perform merely mechanical work, or no work at all, whether the system of half-pay is a piece of wanton wastefulness, whether the whole principle of Superannuation needs investigation. These are questions which must be asked by the people's representatives, and an opportunity for asking them should be furnished without delay. Lord Randolph Churchill's committee on the army and navy is to resume its sittings immediately after the opening of the session of 1888. If its work were divided between two committees, and if a third committee were appointed to deal in a similar fashion with the Civil Service, there would begin to be some

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chance of progress. In a few years the committees would be able to overhaul the Estimates of each session thoroughly before a single vote was required. Votes on account would be abolished, and no money granted without full discussion. Members serving on these committees would gradually gain an insight into the real work of Government, and would realise that, after all, legislation is not their highest function. Coming into close contact with the permanent officials they would compel these gentlemen to realise more keenly their individual responsibilities. Their own opportunities for obtaining better acquaintance with the work of the State would make them gradually more efficient critics, and more independent of the two front benches, which are now often found combining against retrenchment. It would then become almost a matter of course that the recommendations of a financial committee should receive the approval of the House. Above all, it is certain that more authentic information would then be within reach of the taxpayer, enabling him, if he will, to discharge efficiently the duties of citizenship.

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WHEAT-FLOUR.

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**W**HEAT is, of all the cereal grasses, the most valuable to man, and with the exception of maize, the most productive. Other grasses have been transformed by cultivation into wheat-yielding grasses. A botanical description of the wheat plant is not intended here, nor is it intended to describe the differences in the various kinds of wheat—the white and the red, the bearded and the beardless, the fern, the mummy, &c., &c., the last of which was said to have been produced from seeds found in mummy cases in Egypt; but the impossibility of this origin is now regarded as established. From a single seed of mummy wheat 60 ears have been produced, and 150 grains have been found in one ear. Wheat is grown over a very large proportion of the habitable parts of the earth. It attains its greatest perfection in temperate regions. In Europe its northern limit is about the latitude of St. Petersburg, and in the torrid or equatorial regions it can only be successfully cultivated in elevated positions. Speaking generally, the lands where wheat can be most successfully cultivated are those where civilisation has become most advanced.

When we in the present day join in a "Harvest Thanksgiving," we are scarcely in a position to feel the joyous thankfulness experienced by our forefathers of 500 years ago, when, an abundant harvest having been gathered in, wheat has sometimes fallen in price from eighty shillings per quarter to six shillings and eightpence. A bountiful harvest was indeed in those days a transformation scene from want to abundance, and the universal joyfulness can be better imagined than described. Thanks to commerce we are not now subject to such tremendous fluctuations in the



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price of an article of food which has been very appropriately termed "the Staff of Life." Mr. Mulhall, the statistician, tells us that in 1881 we consumed in the United Kingdom 72 millions of bushels of home-grown wheat, and imported 135 millions; and from the figures given in the Financial Reform Almanac, our imports of wheat—in flour and in grain—in 1885 were about 148 millions of bushels.

For the purpose of separating the grain from the ears, the earliest method, adopted before history began, would, doubtless, be beating the ears with a stick. A modification of this early process is the *flail*, consisting of a short stick (the swiple), loosely fastened to a longer one (the handshaft) by strong thongs (caplins) of eel-skin, leather, or other material. The flail held its place in wheat-thrashing through many centuries without improvement, and may be seen even to this day in the barns of some small farmers in this country. Many attempts were made to supersede the flail, and eventually, in 1787, Andrew Meikle, "an ingenious Scotch mechanic," produced a thrashing mill so excellent in the method or principle adopted, that the thrashing-machines now in use, just a century later, are essentially Meikle's mill, with additions and improvements in detail.

In producing flour from the wheat grain, the principle of the upper and nether millstones has held its ground for thousands of years. A hand mill sent home by Dr. Livingstone, from South Africa, he describes as "a mill such as Sarah used, when told by her lord to do the thing handsomely and in a hurry for the strangers, *i.e.*, a big stone worn hollow by the operations of grinding. The upper (small) stone is grasped by both hands, and the weight of the body brought down on it as it is shoved to the lower part." In making the upper stone revolve, whether by hand, wind, water, or steam-power, the principle still remains the same. This old method is now, however, rapidly giving way, and is being replaced by what is known as the New Process—the new system of grinding flour by rollers. Roller-milling was practised in Hungary, Austria, Germany, and the United States of America some years before it was introduced into this country in 1874. For an interesting account of this new process we refer our readers to our "Annual" for 1884, pp. 106-7.

When the husk, or what is known as the bran part of the wheat, is taken away, and the flour remains, it becomes necessary to make the flour into bread. Doubtless bread would long be made and consumed in the unleavened condition before any means of leavening became known. In the Old Testament we find that, after leavening was known, unleavened bread was used in theological ceremonies, such as meat offerings; and in later days the Christians of the Greek Church were called by the Latins "Fermentarians," on account of their using fermented bread in the Eucharist. Even in our own day, in the Australian bush, the bushman, unable to provide himself with leaven, mixes his flour and water without leaven, bakes it in or upon the hot ashes of his fire, and calls the product by the name of "damper." His daily three meals are or were said to consist of—1, mutton, damper, and tea; 2, tea, mutton, and damper; 3, damper, tea, and mutton. From the Latin root *Levis*, signifying "light," the word leaven is derived; and, when applied to bread, means light, porous, or spongy. That kind of bread is always more agreeable to the stomach on account of its lightness, and more nourishing to the body because it is more digestible.

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Flour from which the bran has been completely separated makes not only the whitest, but also the lightest and most digestible bread. It is also the most nourishing, because it contains more gluten in proportion to its weight. Dr. Simpson, of the Manchester Royal Infirmary, said in a lecture, about two years ago, "The outer part of the bran is quite indigestible, being composed in great part of a layer of flint, and it remains so, however finely it is ground. It follows, therefore, that it is useless as food, and worse, because it irritates the bowels, and causes the too rapid removal of nutritious matter from the digestive canal. The inner coating of the wheat is, however, rich in gluten, and has distinct nutritive value. It is more abundant in the *seconds* than in the finest flour, and makes the former more valuable for bread than the latter. Ordinary brown bread, which contains a considerable quantity of indigestible bran, is not an economical food from any point of view." Much has been said and written in praise of brown bread, and in condemnation of the white. We find, however, that with the exception of the proverbial one in a thousand, who is said to prove the rule, the great body of the public almost unanimously take to the white whenever they can get it. It is sometimes alleged that brown bread is more "satisfying" than white bread. That, however, is only because it is more indigestible.

On this point, Sir William Roberts says:—"The food customs of mankind are the result or outcome of an enormous amount of experience gradually accumulated in the course of ages, and the researches of chemists and physiologists tend to show that these customs are in harmony with science."

The whitest of flour has had taken out of it what is known as the "germ." The germ contains a considerable proportion of fatty matter, and flour from which the germ has not been extracted is of a somewhat darker colour, but it has a higher nutritive value.

On the relative merits of "germ" and "roller" flour, Mons. Lucas, director of the flour market at Paris, says:—"The baking quality of flour depends chiefly on the oil contained in the germs of the grain. By the roller process these germs, and along with them the oily matter, are separated from the flour while they are retained in burr flour. The burr flour has, however, its defects also. The oil retained in it is greatly oxydable, making the flour become spoiled in a very short time, which is impossible with the roller flour, the latter being void of any oily matter." The conclusion which M. Lucas, therefore, arrived at was, that burr flour may be used for bread-making while it is fresh—that is, a short time after its manufacture. It is then decidedly superior to roller flour so far as the taste of many is concerned. But flour which is to be stored for commerce or traffic, should be ground on rollers, because the absence of the oily matter prevents it becoming spoiled.

We should think the germ-flour, while fresh, would be particularly acceptable to vegetarians, seeing that it would give them, to some extent, a substitute for the fatty matter which they deny themselves in refusing to eat flesh meat. But unless the germ flour can be had quite fresh, which is practically impossible for general public consumption, both the vegetarian, and he who is otherwise, would do well to adopt the roller flour, and consume fat in some other form, say butter for the one, and gravy for the other. In the creation of a public taste for a darker coloured



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flour, is there not some danger that the colour would often be the result of inferiority, and not the result of the retention of the germ? Would not competitive strife tend in that direction?

The rejected germ will not be wasted; it makes excellent food for cattle, and will thus come back to us in another form.

In England bread was made with yeast (wet barm) in 1634; and some forty years ago or more dried yeast, known as German yeast, came into use. The latter article is chiefly produced by the continental distilleries, and many thousands of tons are annually imported into this country. Aërated bread was made in England in 1859, and some years earlier in the United States of America. It is made by moistening the flour with carbonic acid water. The dyspeptic may eat it while new without experiencing the ill consequences of eating new fermented bread. In aërated bread the whole of the waste caused by fermentation is saved, for a weak stomach it is the desideratum, and if all the bread we consume were made by this process, the saving in the consumption of flour would be very considerable. In the making of fancy bread, such as fruit loaves, seed loaves, or sponge loaves, a baking powder is used consisting of two parts by weight of bi-carbonate of soda, and one part of tartaric acid. These two, when brought into moist contact, give off carbonic acid gas. Whether the bread be fermented, aërated, or fancy, the agent which makes the bread light, porous, or spongy is, in all cases, carbonic acid gas.

The mixing or kneading of dough preparatory to the baking of the bread was always done by hand until 1858, when machinery was first used. The "Mixer" is either the "Globe" or the "horizontal drum," with variations by different makers in the form of the knives revolving inside. One or other of these is now in use in all large concerns, and the cleanliness of the operation is so great a contrast to the hand-mixing that anyone who could witness both methods would never again buy bread made on the old hand-kneading system.

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### SOME WAYS OF JUDGING FLOUR AND YEAST.

There are several ways of testing or judging flour and yeast before using them :

#### FLOUR.

1. The public baker is enabled by long practice to pass a very accurate judgment of flour by the sense of touch or by the feel of it in the hand. He detects at once a difference in smoothness which the unpractised hand could not ascertain, and pronounces forthwith upon the different degrees of "hardness" and "softness."

2. A small quantity of flour put into the mouth and worked by the tip of the tongue to about the consistency of putty, and then broken or pulled asunder by the fingers to see if it break "clear," or shows signs of "stringiness." If it break clear, it is good; if, in pulling it asunder, it will bear to be much elongated without breaking, the flour is not good.

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3. If a quantity of flour be taken and pressed in the grip of the hand and then the hand opened, the flour will, if good, retain its shape and a well-defined impress of the marks of the hand a considerable time. Otherwise the flour is not good.

4. Press a quantity of flour with some smooth surface, such as the outside of a tin measure or scope (not dinged or corroded) or the outside of some smooth piece of crockery; if the smooth surface of flour thus caused shows "specks" or spots, the flour, whether made from a good grain or not, will make a dark bread. Flour should be kept dry, but not warm.

## YEAST (DRY OR GERMAN YEAST).

It should break "short." It should not be "soft." It should not take readily an impression from the touch. It should not give out a disagreeable odour. When good, it has a pleasant smell; when bad, it takes a darker colour.

## BEER YEAST (WET BARM).

Its taste should be agreeable, fruity, and slightly acid. If the vessel containing the yeast be placed in another vessel containing warm water, the yeast will "rise" if good; if not good, it will not rise. Let a few drops fall into boiling water; if they float, the yeast is good—if they sink, it is not good. To increase the energy of yeast, add a little sugar with a little warm water. It will then "rise," and should be used at once.

Public bakers, when mixing the "sponge," often add some boiled potatoes, finely mashed, and sometimes a little sugar. This gives greater certainty to the result. It improves weak yeast, and gives increased energy to good.

Bread made from beer yeast has a slightly bitter taste. To avoid this result, wash the yeast with cold water; that is, pour cold water upon it, stir it a little, let it "settle," and then pour off the water. Repeat this two or three times. This process diminishes the bitterness, but, unfortunately, it also diminishes the strength of the yeast. There are other methods of removing the bitterness, but they are mostly too complicated for domestic use.

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VALUABLE OPINIONS ON CO-OPERATION NOT QUOTED IN  
PREVIOUS ISSUES OF THE "ANNUAL."

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HER MAJESTY QUEEN VICTORIA, in acknowledgment of a copy of the Society's "Annual" for 1883:—

"A movement which not only encourages thrift, but which also teaches the habits of business and promotes education among so large and important a body of her people."

His Royal Highness the PRINCE OF WALES, in acknowledgment of a copy of the Society's "Annual" for 1883:—

"A scheme which is admirably adapted to raise the standard of the knowledge and intelligence of the working men of this country, and to increase their welfare and happiness."

LORD DERBY, in the inaugural address to the Leeds Co-operative Congress, 1881:—

"It is not in the language of idle flattery, but as the expression of a deliberate and sincere conviction, that I begin by telling you that the subject which brings this Congress together is, in my judgment, more important as regards the future of England than nine-tenths of those discussed in Parliament, and around which political controversy gathers."

MR. ALBERT GREY, in his election address, 1886:—

"I believe that the greatest hope of a permanent improvement in the condition and status of the working classes lies in the successful application of the co-operative principle to the cultivation of land, and other productive industries. I will help on, to the best of my ability, the wise efforts of free men in bringing about its voluntary and spontaneous application to industrial enterprise."

SIR WILFRID LAWSON, in opening address on the second day of the Carlisle Congress, 1887:—

"I believe the co-operative movement, by purifying and elevating commerce, will make it a nobler and worthier instrument for promoting the friendship of the world, and in hastening the advent of that glorious day which, though long delayed, shall dawn at length upon this sorrow-laden and sin-stained earth, when men shall be able to say with truth—

"The war drum throbs no longer, and the battle flag is furled  
In the Parliament of man, the federation of the world."

## VALUABLE OPINIONS ON CO-OPERATION.

Bishop MOORHOUSE, in an address to the Bury Co-operative Society,  
October 30, 1886 :—

“The principles of co-operation have already far more influence over modern developments than many people seem to know. When we have extracted from co-operation its utmost possible results, we shall have greatly improved the whole labouring class in this country. We might not have abolished poverty, for there would still be idle and thriftless people, but for every man who could work, and who would work, we should have obtained the means of creating a good and a happy life. There would be no destitution, standing like a giant in the path; we should have taken away all obstacles to a happy life; and if men would seek the Divine help to abolish their own selfishness, under such circumstances this land might become as prosperous as it is now fair and free.”

Sir EDWARD WATKIN, M.P., in an address to the members of the Manchester and Salford Equitable Co-operative Society, November 8, 1884 :—

“For my own part, I look upon the co-operative societies as a golden bridge to span between the interests of competition and the interests of co-operation. Such a golden bridge is a resource which, when there are conflicts between capital and labour, comes in so usefully and so pleasantly to show men that they have mutual interests, provided they will have mutual trust and confidence.”

Mr. HODGSON PRATT, in an address delivered to the annual meeting of the Guild of Co-operators, May 15, 1886 :—

“Co-operation is, in some of its aspects, a religion. When I look at the history of all the great religions of the world, I see that they had their strength, at their birth, in the hearts of those who worked and were poor. The same fact is in favour of the strength and goodness of our co-operative movement. It had its origin in the religious desire of twenty-eight poor workers, who ‘wanted to reform the world.’ The desire has left its mark upon their successors ever since. It has done much to keep the growth of co-operation free from the stain of greed, of personal ambition, and from the worship of mere material success. That aim has inspired thousands of hard-working men, who gave up hours due to sleep and rest for the service of their fellows.”

Right Hon. A. J. MUNDELLA, M.P., at a meeting of factory operatives in Manchester, August 9, 1884 :—

“There are no more self-reliant men on the face of the earth than the operatives of Lancashire. When I look at the management of your co-operative stores—when I consider that within ten or twenty miles’ radius of this place they manage co-operative distributive and industrial concerns to the extent of ten millions of money—I say that is an illustration of independence of character, self-reliance, and intelligence which has no comparison anywhere else in the world.”



## VALUABLE OPINIONS ON CO-OPERATION.

Dr. OAKLEY (Dean of Manchester), in an address to the members of the Manchester and Salford Equitable Co-operative Society, November 8, 1884 :—

“Co-operative societies really afford a model and a type for all social progress and improvement. They represent the need of co-operation, of fellowship, of union. They say not only that ‘union is strength,’ but that union is righteousness and goodness.”

Mr. JOSEPH COWEN, in an address to a meeting of the North of England Commercial Travellers’ Association, held at Newcastle-upon-Tyne, January 8, 1884 :—

“The shortcomings of co-operators do not invalidate the principles of co-operation. Even in its blurred enforcement, its action has been widely beneficial. It has cleared many a poor man of an overmastering load of debt. It has fostered habits of thrift and forethought, and carried social security and independence to many a fireside. It has familiarised workmen with the hazards of business, and done something to sweeten their relations with their employers.”

The Rev. Canon KNOX LITTLE, in an address to the members of the Worcester New Co-operative Society, October 4, 1883 :—

“I say to you quite honestly, that there is a moral basis about co-operation that commends it certainly to a Christian, and that moral basis seems to me to be something like a sympathy for those who are in want, and a desire to raise those who join the membership to a higher position ; and if the superstructure corresponds to the basis, then the movement must command our sympathy and support.”

The late Bishop FRASER, in opening address on second day of the Manchester Co-operative Congress, 1878 :—

“You in your way and according to your measure, are trying to teach the world that this great principle of Christian brotherhood runs through, really, the whole of our organised social and industrial life, as it runs through our physical system. We are all parts of one great body under one great head, and, as Tennyson says :—

“Like a piece of art,

All toil should be co-operant to an end,

and that end ought to be the welfare, in the highest sense of the word—the physical, moral, social, intellectual, and religious or spiritual well-being of mankind.”

Mr. HENRY BROADHURST, M.P., in an address to the members of the Over Darwen Industrial Co-operative Society, January 27, 1883 :—

“The co-operative movement teaches the working people the value of the ready-money system, and the value of many other things as well, the importance of which political economy can hardly overestimate. If every money-making speculation in this country had been as careful of the education and culture of its workpeople as co-operative societies are in regard to their members, what a happy country this would be to-day, and what remarkable progress would have been made in all branches of education.”

The late Lord SHAFTESBURY, in an interview with a representative of the  
*Pall Mall Gazette* :—

“There is great room for confidence and courage in the progress of co-operation in the north. Co-operation includes just what is reasonable in socialism. It is socialism without dishonesty—the socialism of thrift, of industry, and of foresight; and what a success it has already achieved. In London it has made but little way. In the north, the Lancashire men have accumulated a capital of more than eight millions sterling, the savings of working men and working women. But it is only natural that co-operation should extend most in the north. North country men represent the backbone of England.”

The late Right Hon. W. E. FORSTER, M.P., in an address to the members of the  
Bradford Provident Co-operative Society, January 31, 1885 :—

“One great secret of the success of this movement is, that it has been a spontaneous self-helping movement among the working classes, who have been independent of anything like patronage.”

The Hon. E. LYULPH STANLEY, in reply to an invitation to attend the Oldham  
Co-operative Congress, 1885 :—

“There is no meeting I should have attended with greater pleasure, both from the interest I take in co-operation, and from the confidence with which I look forward to the extension of the movement as a means of increasing the resources and developing the education and self-respect of the working class.”

G. J. HOLYOAKE, in the *Fortnightly Review* for August, 1887 :—

“Co-operation is the organisation of fraternity, by rendering cultivation and competence possible to all. But the day of that is not yet. As Ephraim Jenkinson says, in the ‘Vicar of Wakefield,’ the world is in its infancy. Co-operation is as yet in that state; but the principle is in the minds of men. Co-operation was born of the feeling that unmitigated competition is at best but social war; and though war has its great conquests, its pomps, its bards, its proud associations and heroic memories, there is murder in its march, and humanity and genius were things to blush for, if progress cannot be accomplished by some other means. What an enduring truce is to war, co-operation is to the never-ceasing conflict between capital and labour. It is the peace of industry.”

Bishop LIGHTFOOT, in his inaugural address to the Newcastle Co-operative  
Congress, 1880 :—

“Co-operation seems to me fully to deserve all the enthusiasm which has gathered about it. . . . If it is successful it will work a beneficent, social, and economic revolution of the widest scope—a revolution, moreover, so conducted as to leave no heritage of suffering and no aggravation of bitterness behind.”



## VALUABLE OPINIONS ON CO-OPERATION.

The late Mr. WILLIAM HOYLE, Temperance Reformer, of Tottington, near Bury,  
in a letter to the *Times*, November 14, 1882 :—

“I agree with Mr. Potter as to the value of the co-operative movement. In the village where I reside, as well as in the town of Bury, and indeed I may say all over Lancashire, it has been of immense service in promoting habits of thrift and providence, and, although not yet fully developed, the movement contains the germ of the principle which is to solve the problem as to the due apportionment of the national income between capital and labour.”

Mr. E. VANSITTART NEALE, in a paper read before the Manchester Statistical  
Society, March 9, 1887 :—

“If the principle of association for the promotion of the general welfare is, as I have urged, the expression of reasonable will in its application to human affairs, the practice of association must be expected to foster among all who come under its influence the growth and predominance of reasonable will. Hence it is that, in my judgment, the systematic development of association is of such immense importance to the welfare of mankind. It marks the opening of a new era.”

Dr. TALMAGE, the popular American preacher, in a sermon to working men,  
October, 1878 :—

“Relief will come to the working classes of this country through co-operative association. I am not now referring to trade unions, but I refer to that plan by which labourers become their own capitalists, taking their surpluses and putting them together, and carrying on great enterprises.”

Right Hon. JOHN BRIGHT, M.P., on the occasion of distributing the prizes to the successful students in the science and art classes of the Rochdale Equitable Pioneers' Society, September 25, 1887 :—

“Your co-operative society is one which deserves that everybody in the town, I think, who can do anything towards it should do something towards it, and say something in its favour. I am persuaded it has been of very great service.”

JOHN RUSKIN, in *Fors Clavigera* for December, 1876 :—

“Next year I shall urge the operatives whom any word of mine may reach, to begin some organisation with a view to this object (the purchase of land for national freehold) among themselves. They have already combined to build co-operative mills ; they would find common land a more secure investment.”

Mr. J. M. LUDLOW, in “Good Words” for December, 1875 :—

“Co-operation may have very ugly phases, may seem at times as if it only served to develop new forms of selfishness. But this is only because those who practice it cannot understand, or are not true to its principles ; because they look upon it only as a clever system for doing certain things, intercepting certain profits, and not as a method meant for all mankind, founded upon the laws of the universe.”

The late Professor FAWCETT, in the *Fortnightly Review* for February, 1874:—

“Co-operation has been sometimes described as a socialistic movement. It is impossible, however, for there to be a wider divergence than there is between co-operation and the socialism of the present day. The most prominent characteristic of modern socialism is that people are to obtain more direct aid from the State; whereas co-operation has achieved its success by a union of individual effort, and, far from seeking any pecuniary aid from the State, it would ask for nothing more than to be freed from the mischievous meddling of legislative interference.”

The Right Hon. W. E. GLADSTONE, in an address to the members of the Leigh and Tyldesley Liberal Clubs, September 1, 1887:—

“There has not been a better thing done in this country, in my opinion, than the establishment of co-operation, such as the successful co-operation of which Lancashire deserves the principal credit.”

HORACE GREELY, in an address to an assemblage of coloured people in Poughkeepsie, U.S.A., in 1872:—

“A magic word in this age—co-operation; a combination of small means to make a large capital.”

Mr. C. BRADLAUGH, M.P., in an article in the *Manchester Examiner and Times*, December, 1886.

“In this country the great good of the co-operative movement has resulted from the experiments of Owen and his colleagues, and it is in this direction, and especially from its extensive connection with co-operative production, that I look for the utilisation, not only of the best energy in modern socialism, but of the best in labour redemption.”

Lord DERBY, in an address to the members of the Rochdale Working Men's Club, January 2, 1879:—

“Among all the English communities, Rochdale has the honourable distinction of being that in which the great industrial movement of co-operation has been the earliest and most successfully worked. The men who founded the Equitable Pioneers' Society will, I think, be remembered when many who have made more noise in their time will be forgotten. I am glad to learn that that powerful organisation has, at anyrate so far, suffered but little from bad times. Co-operation will not work miracles; co-operative institutions will fail like others, if they are worked with too little capital, or with too much borrowed capital, or by men who don't understand their business. But whatever may happen in particular instances, I believe the principles which lie at the root of the movement are right and sound, . . . and that they will stand the test of adversity, even though more severe than that of the next few months or years is likely to be. They may not do all that



their promoters expect. They will not transform or regenerate society, but they will effect a really useful and permanent improvement in our social condition; and to this town and to this district the credit of having originated that improvement will be largely due."

MISS JANE HUME CLAPPERTON, in "Scientific Meliorism."  
Kegan Paul, Trench, and Co., London:—

"A science of society in its conscious, rational state is sure to be developed and to supersede political economy; a science in which sympathy and co-operation will take the place of competition, and not wealth alone but happiness will be the object that every social member seeks to attain. The misery of too-exhausting and laborious work, and the misery of idleness, will be alike condemned and shunned; whilst active employment, suited to the capacity of each, will be embraced by all; and to that happiness which springs from exercising all our faculties and then reposing them, there will be added all the higher joys of mutual helpfulness and sympathy in co-operation."

REV. CHARLES W. STUBBS, M.A. (Vicar of Gainsborough), in "The Land and the Labourers." Swan, Sonnischein, and Co., London:—

"Indeed, I venture to say, finally, that if we are ever to succeed in raising the platform of industrial morality, and healing what is at present, I fear, the standing feud between capital and labour, it must be by the substitution of the principles of co-operative faith for that spirit of competitive selfishness which now forms the orthodox foundation of economic science. The ideal of co-operation is, indeed, a noble one, for it means the transformation of human life from a conflict of classes struggling for opposite interests, to a friendly rivalry in pursuit of a good common to all; the elevation of the dignity of labour, a new sense of security and independence in the labouring class, and the conversion of each human being's daily occupation into a school of the social sympathies and the practical intelligence."

The late Professor JEVONS, in "The State in Relation to Labour."  
Macmillan and Co., London:—

"Indirectly, co-operative associations have considerable bearing on trade questions, because they offer the most ready and engaging mode of investment for small sums of capital. Half the bitterness of trade union disputes arises from the anti-capitalist feeling of the workman, and he is by the nature of things cut off from the possession of capital, and even looks upon it as contrary to the *esprit de corps* of his order to own capital. Nothing can tend more to break down this most mistaken and lamentable feeling than the insidious way in which capital accumulates in a well-managed co-operative society. Almost without knowing it the workman finds himself a small capitalist, and when the balance has once begun visibly to grow, it is strange if the love of accumulation is not at length excited. The balance not only grows, but its growth excites the more interest because the owner, as a customer, a member, or even a committee-man, assists in its growth and may take part in the management of the affair."

## VALUABLE OPINIONS ON CO-OPERATION.

ALFRED MARSHALL (late Fellow of St. John's College, Cambridge), in "The Economics of Industry." Macmillan and Co., London :—

"Co-operation is divided from most modern socialistic schemes by advocating no disturbance of private property, by insisting on self-help, and by abhorring State-help and all unnecessary interference with individual freedom. But in other respects co-operation has much sympathy with, and has learnt much from the enthusiasts of socialism. In fact the greatest of English socialists, Robert Owen, was the founder of co-operation, and many of the most earnest co-operators can trace their faith to him. . . . The work which co-operators have set themselves for the present may be classed under three heads. They attempt to remove or diminish the secrecies or discords that exist, firstly between employers and employed (or, as is inaccurately said, between capital and labour), secondly between retail dealers and private customers, and thirdly between retail and wholesale dealers and producers. While pursuing these ends, they aim at enabling working men to employ their own capital in trade and manufacture, and to save out of the profits 'joint capital by joint action for joint purposes.'"

Mr. CHARLES BARNARD, in "Co-operation a Business." G. P. Putman and Sons, New York and London :—

"A social movement that began with strange schemes for benefiting the whole world in half a year, that very properly died and was decently buried, only to spring up again into wonderful activity, must have something in it to win the hearts of men. A scheme that survived the most complete disaster, only to be taken up again by poor men, and started once more amid heart-breaking, stinting, and pinching denials, must have some germinal idea underlying it worthy respectful consideration. Co-operation, as revived, after its apparent death, by flannel weavers and post-office clerks, has been burdened by a most extraordinary load of useless and impractical men and women; and has been hampered until recently by legal restrictions that, if applied to political life, would have precipitated a war. Yet it has steadily grown in favour with the people. It has had more disheartening and disastrous failures than any movement, social or political, and yet it grows from year to year. It has been opposed by the press, the clergy, the law, and the trade in England, and still its stores multiply in the land."

ALEXANDER WYLIE, in "Labour, Leisure, and Luxury." Longmans, Green, and Co., London.

"Distributive co-operation—that is, the co-operation which exists for the sale of products—is the very best training which the working people can have for the more difficult and, to them, much more advantageous form of it, namely, productive co-operation; and it is a very pleasing sign of the times that such a large proportion of them have embarked in this most educative enterprise, and that their number and capital is so very strongly on the increase. In it they are being practically trained in all the principles and details of sound mercantile business—in economy and self-



## VALUABLE OPINIONS ON CO-OPERATION.

denial, to enable them to save the necessary capital, and to pay ready money for what they purchase—in self-reliance, and in respect and trust of their fellow-co-operators to combine their savings—in rectitude of dealing among themselves and with those who sell to them, and in the intelligence which enables them to conduct their business with success alongside of individual competition; and I cordially recommend it to all working men.”

Lord BEACONSFIELD, in “*Endymion*” (a novel). Longmans, Green, and Company, London. Conversation between Enoch Craggs (a workman) and Endymion (a landlord):—

“I sometimes think if we are to be ruled by capitalists, I would sooner, perhaps, be ruled by gentlemen of estate, who have been long among us, than by persons who build big mills, who come from God knows where, and, when they have worked their millions out of our flesh and bone, go God knows where. But perhaps we shall get rid of them all some day—landlords and mill-lords.”

“And whom will you substitute for them?”

“The producers,” said Enoch, with a glance half-savage, half-triumphant.

“What can workmen do without capital?”

“Why, they make the capital,” said Enoch, “and if they make the capital, is it not strange that they should not be able to contrive some means to keep the capital? Why, Job Thornberry was saying the other day that there was nothing like a principle to work upon. It would carry all before it. So say I. And I have a principle too, though it is not Master Thornberry’s. But it will carry all before it, though it may not be in my time. But I am not so sure of that.”

“And what is it?” asked Endymion.

“CO-OPERATION.”

T. EDWIN BROWN, D.D., in “*Studies in Modern Socialism*.”

D. Appleton and Co., New York.

“Co-operation has incited to prudence, and rewarded the prudence to which it incites. It has cured poverty of its recklessness. It has furnished motives for saving—afforded the opportunity, and formed and cherished the habit. By returning to the purchaser, in dividends, what other traders would have retained in profits, it has made true the quaint Lancashire paradox—‘The more they eaten, the more they geten.’ Co-operation has given to a just pride and a generous aspiration the places once held by dulness and despair. It has promoted the Christian sentiment of peace and good-will. The arbitrators appointed to settle internal difficulties have never had a case brought before them, and are said to be somewhat discontented because nobody has quarrelled. Co-operation has taught others than these strictly moral lessons. From the very difficulties which have surrounded it, from the mistakes it has made, and from the failures which have often accompanied its experiments, its advocates have learned valuable truths of economic principle. The whole history of co-operation has been an economic education to the working men

who have been the actors in its modest but stirring scenes. They have learned the necessity of the existence of capital as a force distinct from the labour that originally produced it, and that whatever may be said against capital when it overleaps its true functions and becomes a tyrant, nothing is to be said against it, but all things in its favour so long as it is a useful servant. They have learned that capital, as a distinct force, is like other servants—worthy of its hire, even though that hire be called interest.”

Dr. HEBER NEWTON (Rector of All Souls' Church, New York), in “Social Studies.”

G. P. Putman and Sons, New York and London.

“Now co-operation has its clearly marked limitations. It is of itself no panacea for all the ills that labour is heir to. But it can ameliorate some of the worst of those ills. It can effect great saving for our working men, and can secure them food of the best quality. If nothing further arises, the spread of co-operation may simply induce a new form of competition between these big societies; but no one can study the history of the movement without becoming persuaded that there is a moral development carried on, which will in some way, as yet not seen to us, lead up the organisation of these societies into some higher generalisation securing harmony. It is constantly and rightly said that business can never dispense with that which makes the secret of capital's success in large industry and trade—namely, generalship. Co-operation can, it is admitted, capitalise labour for the small industries, in which it is capable of making working men their own employers; but it is said that it can never, through committees of management, carry on large industries or trade. I can, however, see no reason why hereafter it may not enable large associations to hire superior ability, at high salaries, just as generals give to republics the leadership which kings used to supply to monarchies. There are in the savings banks of many manufacturing centres in our country amounts which, if capitalised, would place the working men of those towns in industrial independence; moneys which, in some instances, are actually furnishing the borrowed capital of their own employers. In such towns our working men have saved enough to capitalise the labour, but, for lack of the power of combination, they let the benefit of their own thrift inure to the benefit of men already rich. They save money, and then loan it to rich men in hiring them to work on wages, while the profits go to the borrowers of their own savings. But the chief value of co-operation, in my estimate, is its educating power. It opens for labour a training school in the science and art of association.”



## BREEDING AND FEEDING OF HORSES AND CATTLE.

BY DAVID JOHNSON,

LATE MANAGER OF RADBOURNE MANOR AND UFTON HILL FARMS.

## HORSES.

MY long experience in the breeding of horses has somewhat altered my views since I wrote on this subject some fifteen years ago. Perhaps it may be that at the age of fifty I am better able to judge and give an opinion; the breeding and feeding of all kinds of cattle having been my continual study along with the cultivation of the land ever since I went to the Agricultural College; or, as I might put it, I was born on an extensive farm and had to work amongst cattle in my early youth, and have been in practice with them ever since. The altered times of farming might have had some little to do with the changing of my views, and knowing that other countries are trying to excel us has no doubt made me and others think more about these matters. It is by putting this thought and study into practice, and knowledge and true practice into writing, that you can communicate it to others, and so set them thinking and criticising of their own free will, that we get at the right plan to breed our stock and hold our pre-eminence. I do not here intend to allude to the breeding and rearing of the racehorse, but to such horses as should actually concern the farmers of this country; yes, and more than that, the Government of this country.

"But are we not losing the pre-eminence of the home of a good horse, and more particularly the army horse and hunter?" I asked of a large farming gentleman the other day. "Yes," was the reply, "but if you breed them you cannot sell them." Now, I really think that is because we do not breed them good enough. But a great deal of good might be done by the Government if they were to encourage our agriculturists to breed good roadsters, army and hunting horses, and good sound carthorses, by sending good thoroughbred sires to stand somewhere about the middle of every county to cover at a low rate.

We now come to the point of breeding. Both sire and dam should be sound, and free from all hereditary complaints. My firm opinion from practice is, then, to breed what we want most in this country—good hunters, good roadsters, and good army horses, with good dray and wagon horses. How to do this I will here try to show in as concise a manner as possible. With regard to the three first named:—The sire should be a good sound thoroughbred or blood horse. I should not object to one that had done good duty on the racecourse, so that he was sound in every way and free from vice; a blemish from accident would not matter in the least. That done, then you should pick some upstanding, active, good cart fillies, two years old, fifteen hands or fifteen hands two inches, and break them in to work, so as

to get them quiet and easily handled, and mate them with this said thoroughbred horse at two years old. The fillies or mares would be best at steady work all the time. If well fed, they will grow and develop more by being in foal at that age than they would without, and will be a source of profit to the owner and a benefit to the country by breeding either one of these three, a good hunter, roadster, or army horse. Why I advise this is that the foals are generally very much smaller and finer in the bone at the time of foaling or parturition, and more easily passed. When you have bred this kind of horse for two years your mares will have grown and developed; then, if you think these mares good enough at four or five years old, you can mate them with a good carthorse; if not, stick to what you are doing. One word more here should be said against what is frequently done—that is, mating a blood or thoroughbred mare with an ordinary cart stallion; this is commencing the wrong way about, and never should be done, for nine out of every ten foals are worth but a very small sum when reared to the age of three or four years; they invariably have a thick head, neck, and shoulders, therefore always avoid this method of breeding, for it is seldom the foals come to any good.

Breeding carthorses, too, is a matter in which we are losing ground; we are not particular enough as to soundness, size, and pedigree of former sires and dams. For breeding it is very important that we should now, more than ever, look to these things. It would be a pity that we should lose our reputation, but we certainly shall without a change takes place in some way. I do not expect much from Government aid, but something should be done soon for the encouragement of breeding our useful kinds of horses. To breed carthorses, we never now find the kind of mare to breed them big enough; we want the head, neck, and shoulders set on well up, deep in the carcase, broad in the quarters, short in the leg, with plenty of bone, sound in every way, and about fifteen hands two inches or sixteen hands high, and mated with a good horse a little higher—these are the kind of mares to keep for breeding; we should then have no fear of losing our pre-eminence.

As to feeding, nothing can be better for young colts than oats and bran in about equal proportions, starting with about four pounds per day and increasing in proportion according to the time and season of the year, and age. I have given them seven pounds per day for three months, and have seen no ill effects, but have found them very much improved in cold weather; care should be taken to have separate stalls to feed in, and each one to have his share; a very important matter is to feed them separately, or many accidents may happen and much injury be done by some getting too much and others too little; a few beans should be added when put to work, and increased as the horses get older; a little clover, hay, or green meadow hay being given once, morning and evening. Colts of all kinds should be handled and taught to lead whilst suckling, which makes them tractable when young, and not much trouble to break in. It would be a great boon to our farming interest if they would try to bring horses to early maturity and breed from young mares, and not keep them on the farms after seven years old, but make it a rule to sell both horses and mares at that age. Horses will get to maturity at four and five; why not early maturity in these breeds of horses, as in racehorses and other breeds of cattle?



## BREEDING AND FEEDING OF HORSES AND CATTLE.

## CATTLE.

BREEDING and feeding cattle is somewhat different to breeding and feeding horses. Cattle should be selected to breed from specially with a view to their beef and milk-producing qualities. They should be bred from sire and dam both possessing hereditary qualities of this kind, and from those breeds that come to early maturity, such as a steer weighing from nine to eleven score a quarter, or, in other words, from 640lbs. to 880lbs. the carcase, after being dressed. I have slaughtered beast steers, at two-and-a-half years old, weighing 13cwt., producing 826lbs. of beef, and sold at 9½d. per pound, the offal realising £2. 18s. 3d. These beasts, or steers, were bred from good square shorthorn beasts, very good milkers—bought in the open market, and then sired to a very good thoroughbred shorthorned bull with a good pedigree. It is not essential at the present day to give long prices for thoroughbred shorthorn cows; without you wish to go in for thoroughbred shorthorn breeding, which is very expensive, and takes much capital and a number of years to establish a name. You can, by buying a good shorthorned bull with a good pedigree, and of a good milking strain, have quite as excellent a stock; and I know from experience that you will have better breeds for milking, feeding, and for ordinary farming, as well as for making good returns, than you would by starting with all thoroughbred shorthorns. Great care should be taken in selecting your breeding cows, for the selection will do quite as much as the pedigree, and even more. If your judgment is deficient and you are careless in buying your beast, it will make a considerable difference, more particularly with the sire or bull. You should be very careful not to buy a bull at a low price; no matter how good his pedigree, if the bull is not a really good one, or is defective to any great extent, the calves will almost certainly inherit all his bad qualities. A sire or bull may be the cause of sixty faulty calves or more whilst a dam or cow can only be the cause of one, so you see how essential it will be to procure a good sire or bull. This done, you will be in a good line for breeding first-class calves. Care must be taken to see that there are no malformations or deformities, for before my experience in breeding had gone many years on record, I found that I had made a mistake in not examining them to see if they were male or female. Only this last season I had two that the stockman had put by to rear which were not fit from this cause, and he knew nothing of it.

The next matter will be how to house and feed them the most economically, and at the same time to keep flesh on the calf until ready for the butcher, either at eight weeks old, or two-and-a-half years and over. If you wish to make only fat veal, no way is so profitable as to let the calf suck the cow, but not to run about with her; it spoils the cow for dairy and milking purposes; and to let a calf run with the cow for rearing does the same and is very wasteful, because fatty matter enough can be added to the skim milk for rearing calves at one-fourth the cost after you have taken the cream away. That which will be found best suited to rearing calves is a little ground linseed boiled—one pound to one gallon of water, if you are short of milk, but if you have skim milk enough do not give any water, but put half a pound of linseed meal into a gallon of skim milk. Again, I have found in practice that rearing calves should be fed the first month three times a day, in small quantities of the mixture as above, not more at first than two quarts, increasing as they get

older, at the same time teaching them to eat some nice green hay and other food, not mangel-wurzels for young calves, but a few swedes, a little cabbage, cut hay, chaff, and a little linseed cake; then after they are about six weeks old, you can reduce the quantity of milk and keep some nice fresh water in the place for them to drink. If a number of cows' milk is mixed it should be boiled before giving it to the calves, or they will be sure to scour and possibly die; if they do not die they will lose all the calf flesh and never do so well again. Great care should be taken never to let them lose the calf flesh, or, in other words, never let them lose flesh, but keep them healthy all the time; and more so those that are intended for beef only, for the earlier you can get them ready for the butcher the more they will pay, and the better we shall be able to hold our own against foreign countries. I find that not turning them out to graze is the best plan that ever I practised with rearing calves—that is, do not turn them out for the first summer into the fields, but keep them in yards or sheds and feed them with whatever green food you can get. They do much better, and will eat food in and under cover that they will not eat out or in the fields. Besides that, it is very rare indeed that they ever have black leg or quarter evil when they are in yards or under cover. Another important item is to keep them apart all the time you are giving them milk, so that they never learn to suck each other; if they do this it does them a very great injury, and often causes much trouble hereafter. Care should be taken to dress them along the back with some good dressing before turning them out into the yard or paddock, to keep the warble fly off their backs; these flies produce the grub so often found in or under the skin of all cow stock, and injure the hide very much, depreciating it in value considerably. It will greatly add to the comfort of all cow stock by dressing them, no matter if they are milking, feeding, rearing, or store beasts. They feed and rest, and they never gallop about when properly dressed, therefore it adds very much to the profit of all cow stock, both in flesh, milk, growth, and hide. They should be dressed at least four times—once in early spring, and at three equal intervals before the 29th September; and if any fresh stock are bought, they should at once be examined and dressed, no matter at what time of the year. Mc.Dougal's dressing is the best. Another important matter is the food of milking cows and feeding beasts. If milk-selling should be your only object, and no butter at all be made, you must understand that food which will produce the most milk will not produce the most butter, neither will it produce butter that is good, under the best management. Green hay, second cut of clover, or Italian rye grass cut young, are the best food for milking cows to make butter; when the products are made into good green hay, and part cut into chaff and part given along with good ensilage made from any kind of green produce, and mixed with the ordinary hay (about half), it very much improves the colour and flavour of the butter, and produces a much greater quantity; bran, oats, and wheat in proportion, the bran to be scalded or hot water thrown over it, the oats and wheat to be ground into meal, and then mix chaff, hot bran, and meal altogether, letting it ferment or heat for a short time. Care should be taken to give the cows this feed in winter time whilst it is warm; much more milk and butter will be produced by giving the food warm than cold. Ensilage is a very important food for feeding dairy cows for butter-



making, the colour and flavour being so much better. Mangel-wurzel and red carrots are very good food, but not too many mangels; carrots can be given any time before Christmas, but mangel-wurzel should not be given before the latter end of February, and then not to cows that are suckling calves, nor just before calving, or the calves will be sure to scour and very likely die; and so will rearing calves, unless the skim milk be boiled. It is only with difficulty the ordinary farm labourers can be forced to do these things as they should be done; they are too careless to read, and they will not even take notice. I am sorry to say experience has taught this fact to those who have watched these things for a lifetime. Linseed and cotton cake can be given, and palm nut meal with maize meal scalded, but not turnips, swedes, cabbages, or bean or pea meal for making good butter. For producing milk for sale and not for butter-making, I could never find anything to produce the same quantity as brewers' grains, scalded bran, bean meal, swedes, mangel-wurzels, with cut hay chaff; but if you wish to feed, and not to breed from your cows, give them as well as the grains, &c., double the quantity of bean or pea meal, and four pounds of good linseed meal; then you can feed and milk. Care should be taken to have quite as many new or fresh cows which have just dropped their calves, because if fed with the first-named they will not give near so rich milk as the ones that are being fed off for slaughter. Much is gained by giving milking cows some dry corn food in the summer time whilst out at grass; the extra cows that can be kept on a given quantity of land, and the extra quantity of milk, will be quite 25 per cent; but, this requires extra capital. Quite the same rule will apply to feeding beasts, steers, or cows. Do not give them too much, in any case, at one time, so that they can leave any in the manger. If they do not eat it up well, or do not eat sufficient, they should be enticed to do so by giving them a little more meal, or anything they take the most liking to (I have used a little of Beach's condiment and found it very beneficial). Too much care cannot be taken in keeping clean water before them, and in keeping the places clean; whitewashing keeps all cattle healthy and gives them more light. A very small quantity of chloride of lime is very essential to be thrown about. I have saved beasts on the opposite side of a yard from taking the foot-and-mouth disease, and pigs in the next pen having swine fever, by using a little chloride of lime. Milking or fattening beasts that are being stall-fed should be fed five times in the length of the day, beginning at five o'clock in the morning, again at eight, at twelve, at four, and at seven, and should be left as clean and as quiet each time as possible, and should not be disturbed only at feeding times—strangers to be kept from feeding them as much as possible. I find the best feed for bullocks and large cows to begin with to be 4lbs. of bean meal and 2lbs. of linseed per day, increasing it in the course of about fourteen days to 7lbs. of bean meal and 4lbs. of linseed per day, with any kind of roots (except mangel-wurzel); very little long hay to be given, but what quantity of cut chaff they will eat with the roots, &c. It is of no use having a person to feed and look to stock who thinks too much of his time and trouble to wait on them; regularity and care in feeding is of the utmost importance, and no amount of food will feed them without such is bestowed on them; and it is hard to find one among the general farm labourers who does not think too much of his trouble.

## SHEEP.

I now come to the breeding and feeding of sheep, and the first thing to be studied in reference thereto is much the same as in the foregoing. The public taste must be considered, and in doing so, it should be our endeavour to breed sheep that will bring the best returns, grow into the largest weight of lean meat, with the largest and best qualities of meat and wool in the shortest time. There may be some critics who have their favourite breeds, but I have none, and am writing from observation and practice for the interest and benefit of others.

The Shropshire sheep can make their homes in almost any part of the civilised world, and certainly in any part of this country. The Hampshire sheep, I believe, from my own experience, come to early maturity sooner than the Shropshire sheep, but are not so adaptable to climate, and cannot do with cold land and a cold locality.

The Cheviot is a very good sheep for hilly land and rough pastures, with good wool. Generally speaking, if a good Shropshire ram or a good Hampshire ram is crossed with good Cheviot ewes they change the character of the meat very much for the better—the lambs are larger, get fat sooner, and when kept to grow into sheep (say twelve or fifteen months old) the mutton is very much in demand by all the large butchers who supply gentlemen's establishments, being smaller in the joints and of a very superior quality.

The Oxfordshire ewe—a black-faced and black-legged sheep—very much like the Shropshire, but a little longer in the back and legs, and a longer and pointed head, is a very good kind of ewe for a cross with the long-woolled Gloucestershire, making very fine sheep, their wool at the present time being considered the best for the market, and commanding the best prices. They get to be very weighty when about nine or ten months old. I have known them at that age to weigh from 90lbs. to 110lbs. They are large consumers of food where plenty of turnips, swedes, &c., are grown on the arable land, and can be fed off on the land, and are quite as profitable as the Shropshire or Hampshire sheep.

It is a very good plan to put the ram with a few of the oldest ewes about the first of August—then they bring forth lambs about New Year's Day. Twenty-one weeks from the time of being served by the ram you may expect lambs. Forty weeks from the time cows are served by the bull you may expect calves. Eleven calendar months from the time a mare is served by the horse you may expect a foal. Of course, there are exceptions, such as a mare going twelve months, and a cow forty-one weeks, but they are very rare. A sow goes sixteen weeks from the time of being served by the boar, and very seldom a day more.

The Dorsetshire horned ewes will bring forth lambs twice in a year, or almost at any time in the year, but they require a warm neighbourhood, on warm land, with plenty of provision made for wintering them; then good lambs, weighing 38 and 40lbs. each, can be had about Christmas ready for the butcher, commanding high prices when mutton is dear. They are ready for slaughtering at Christmas and for two months after, but they are expensive to get; yet from my experience and from others I know in the Midland Counties who have tried them, we agree in saying they do not pay for the extra food and trouble, unless all kinds of meat are dear. I have often put the ram with horned Dorsetshire ewes about the last week in April to



## BREEDING AND FEEDING OF HORSES AND CATTLE.

start with, and let him run with them all the time for twelve months, and then change him and put another with them—marking one month with blue and another month red—the shepherd marking the ewes that come each month throughout the year. No kind of sheep paid me better when I could look forward to plenty of cabbage, thousand-headed kale, swedes, mangels, &c., for food for them at any time. A few like these would pay well on any farm; they are very docile, and will eat any kind of corn or cake. Linseed cake and crushed wheat is the best food I could ever find for feeding sheep with lambs in the winter time, with the succulent food and clover hay aforesaid. There are many other breeds of sheep, but the great public fancy is for more lean meat mixed with the fat; and there is no breed of sheep, without they are crossed with the black-faced—(not Scotch black-faced)—English breed that possess these qualities. The many breeds of sheep that I know of would take pages to enumerate, but the greater part of those I have mentioned are calculated to meet the public demands.

Great care should be taken with the breeding of ewes after the rams have been with them, keeping them from being frightened with dogs, run with horses or colts, or any other fright, not allowing them to creep under gates, rails, or through holes in the fences, or over gutters and ditches, if put in fields where small watercourses are, and no roads over, or even one or two roads, for if they jump them it will cause abortion, and a great loss with a breeding flock will be the result.

The ordinary agricultural labourer is very careless about these matters, and for the want of better education and better knowledge makes light of these things; but the scientific and practical education that has come to my lot teaches me that I should not trust to them, and I advise others not to do so.

A breeding flock may get most of their food on any ordinary turf or grass land, unless the land be covered with snow. The Scotch and Welsh sheep often live for months without any hay, or anything, being given them. These mountain sheep have to endure very great hardships, and thousands are lost through starvation and utter neglect, owing to the large tract of land they have to roam over in the winter time. Thousands of lives might be saved, I am sure, if smaller enclosures were made, and food given them in the depth of winter. According to my long, practical knowledge, little food will suffice for a breeding ewe when the land is free from snow, and not too much rain. No turnips, swedes, mangels, or any succulent food should be given them until about the last two weeks before parturition, and not then if the ewe appears to have plenty of milk. This succulent food is very apt to make the lambs grow too large before parturition, often causing the loss of ewe and lambs. Sweet hay, clover hay, or hay and pea straw thrown about the land is about the best way to feed breeding ewes, not in troughs or racks, for by crushing and forcing each other at these racks and troughs they often cause abortion. They eat this kind of food, and do not waste so much as when put in racks; but, of course, if it comes to cutting wheat straw into chaff, and mixing boiled linseed with the cut wheat straw, then troughs must be resorted to. The boiled linseed and wheat straw chaff should be mixed while the linseed is hot, and be allowed to ferment for twelve hours before giving to the ewes. This food in extreme seasons like the present, when all kinds of food are scarce, is good food for all kinds of sheep to tide them over the winter.

## BREEDING AND FEEDING OF HORSES AND CATTLE.

After ewes have lambed, any kind of succulent food, with a few split beans—say half a pint per day—and a run on the pasture, or, better still, some rye grass and clover, care being taken that they are housed at night in cold and stormy weather.

Young sheep must be folded or penned up in a yard to learn them to eat corn or cake, or any dry food—that is, if they have not already learned with the dam or mother; and then oftentimes when they are first weaned they will not take to the trough food, clover, hay, cake, corn, &c., without penning up or folding. For fattening sheep there is nothing like some good arable land, where turnips, swedes, mangels, &c., can be grown, and eaten on the land where grown; then with a little clover hay, or good well-got meadow hay, and plenty of roots, beginning with white turnips first, then swedes, then mangels in the spring and early summer, with  $\frac{1}{2}$  lb. of wheat, whole, not ground into meal, and  $\frac{1}{2}$  lb. of linseed cake, or  $\frac{1}{2}$  lb. of linseed and  $\frac{1}{2}$  lb. of decorticated cotton cake. Corn should not be ground into meal to give sheep, they never do so well on meal as crushed or whole corn; and it should be borne in mind that sheep feed better with, first, linseed cake and wheat; second, with linseed cake and peas; third, with linseed cake and barley; and, fourth, with linseed cake and beans, either at grass, or on arable land at root, or any other way. Maize, either round or flat, is next in proportion for fattening sheep, any other kind of corn making but very little improvement in them. In fattening sheep on grass land in the winter I have found that they feed very much faster by putting them for about sixteen hours per day into a nice dry fold, or covered yard, and feeding them with all other food you have to give them.

The foregoing suggestions are from experiences of my own from time to time, and also from experiments made by the Royal Agricultural Society at Woburn, which I have been allowed to see and inquire into.

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## CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM.

### STATISTICS SHOWING THE POSITION AND PROGRESS OF THE CO-OPERATIVE MOVEMENT FROM 1862 TO 1885.

THE following tables are continued from the last year's Annual, with the figures for the year 1885 added. The Parliamentary Returns for 1886 are not yet issued.

Table 1, which relates to the whole of the societies in the United Kingdom, shows that at the end of 1885 there were 1,491 enrolled; of these 1,441 had furnished returns, whilst 50 had omitted to do so.

These 1,441 societies had a membership of 850,659 persons; their sales for the year were £31,305,910; they realised a net profit of £2,988,690, and granted £20,712 to educational purposes.

Compared with the figures for 1875 the foregoing results show very substantial increases, viz., 77 per cent in membership, 69 per cent in sales, 109 per cent in profit, and 90 per cent in grants to educational purposes.

The total sales for the twenty-four years 1862 to 1885 are £367,245,670, on which a net profit of £29,959,561 has been realised.

Table No. 2 relates to societies in Great Britain; No. 3 to England and Wales; No. 4 to Scotland; and No. 5 to Ireland.

From the last three tables we extract the following comparisons:—

#### Co-OPERATION IN ENGLAND AND WALES DURING 1875 AND 1885.

|                                  | 1875.      |    | 1885.      | Increase<br>per cent. |
|----------------------------------|------------|----|------------|-----------------------|
| Societies (making returns) ..No. | 926        | .. | 1,114      | 20                    |
| Members .....                    | 420,024    | .. | 717,019    | 71                    |
| Capital (share and loan) .....   | 5,212,930  | .. | 9,773,308  | 87                    |
| Sales .....                      | 16,206,570 | .. | 25,858,065 | 59                    |
| Profits .....                    | 1,250,570  | .. | 2,419,615  | 93                    |
| For educational purposes .....   | 10,454     | .. | 19,374     | 85                    |

#### Co-OPERATION IN SCOTLAND DURING 1875 AND 1885.

|                                  | 1875.     |    | 1885.     | Increase<br>per cent. |
|----------------------------------|-----------|----|-----------|-----------------------|
| Societies (making returns) ..No. | 237       | .. | 317       | 33                    |
| Members .....                    | 59,260    | .. | 132,597   | 124                   |
| Capital (share and loan) .....   | 425,599   | .. | 1,374,338 | 223                   |
| Sales .....                      | 2,277,812 | .. | 5,415,091 | 138                   |
| Profits .....                    | 176,795   | .. | 566,540   | 220                   |
| For educational purposes .....   | 425       | .. | 1,338     | 215                   |

#### Co-OPERATION IN IRELAND DURING 1875 AND 1885.

|                                | 1875.  |    | 1885.  | Increase<br>per cent. |
|--------------------------------|--------|----|--------|-----------------------|
| Societies .....                | 7      | .. | 10     | 43                    |
| Members .....                  | 792    | .. | 1,043  | 32                    |
| Capital (share and loan) ..... | 15,008 | .. | 9,447  | *37                   |
| Sales .....                    | 15,519 | .. | 32,754 | 111                   |
| Profits .....                  | 1,725  | .. | 2,535  | 47                    |
| For educational purposes ..... | —      | .. | —      | —                     |

\* Decrease.

CO-OPERATIVE SOCIETIES,  
TABLE (1).—GENERAL SUMMARY of RETURNS  
(Compiled from Official

| YEAR.     | NUMBER OF SOCIETIES.       |                        |                    | Number<br>of<br>Members. | CAPITAL AT END OF YEAR. |           | Sales.       | Net Profit. |
|-----------|----------------------------|------------------------|--------------------|--------------------------|-------------------------|-----------|--------------|-------------|
|           | Registered<br>in the year. | Not Making<br>Returns. | Making<br>Returns. |                          | Share.                  | Loan.     |              |             |
|           |                            |                        |                    |                          | £                       | £         | £            | £           |
| 1862      | a454                       | g68                    | 332                | 90,341                   | 428,376                 | 54,499    | 2,333,523    | 165,562     |
| 1863      | 51                         | 73                     | 381                | 111,163                  | 579,902                 | 76,738    | 2,673,778    | 216,005     |
| 1864      | 146                        | 110                    | 394                | b129,429                 | 684,182                 | 89,122    | 2,836,606    | 224,460     |
| 1865      | 101                        | 182                    | 403                | b124,659                 | 819,367                 | 107,263   | 3,373,847    | 279,226     |
| 1866      | 163                        | 240                    | 441                | b144,072                 | 1,046,310               | 118,023   | 4,462,676    | 372,307     |
| 1867      | 137                        | 192                    | 577                | 171,897                  | 1,475,199               | 136,734   | 6,001,153    | 398,578     |
| 1868      | 190                        | 93                     | 673                | 211,781                  | 1,711,643               | 177,706   | 7,122,360    | 424,420     |
| 1869      | 65                         | 133                    | 754                | 229,861                  | 1,816,672               | 179,054   | 7,353,363    | 438,101     |
| 1870      | 67                         | 153                    | 748                | 248,108                  | 2,035,626               | 197,029   | 8,201,685    | 553,435     |
| 1871      | 56                         | 235                    | 746                | 262,188                  | 2,305,951               | 215,453   | 9,463,771    | 666,399     |
| 1872      | 141                        | 113                    | 935                | 330,550                  | 2,969,573               | 371,541   | 13,012,120   | 936,715     |
| 1873      | 226                        | 138                    | 983                | 387,765                  | 3,581,405               | 496,830   | 15,639,714   | 1,110,658   |
| 1874      | 130                        | 232                    | 1,031              | 412,733                  | 3,905,093               | 587,342   | 16,374,053   | 1,228,038   |
| 1875      | 117                        | 285                    | 1,170              | 480,076                  | 4,403,547               | 849,990   | 18,499,901   | 1,429,090   |
| 1876      | 82                         | 177                    | 1,167              | 508,067                  | 5,141,390               | 919,772   | 19,921,054   | 1,743,980   |
| 1877      | 67                         | 246                    | 1,148              | 529,081                  | 5,445,449               | 1,073,275 | 21,390,447   | 1,924,551   |
| 1878      | 52                         | 121                    | 1,185              | 560,993                  | 5,647,443               | 1,145,717 | 21,402,219   | 1,837,660   |
| 1879      | 52                         | 146                    | 1,151              | 572,621                  | 5,755,522               | 1,496,343 | 20,382,772   | 1,857,790   |
| 1880      | 69                         | 100                    | 1,183              | 604,063                  | 6,232,093               | 1,341,290 | 23,248,314   | c1,868,599  |
| 1881      | 66                         | ..                     | 1,240              | 643,617                  | 6,940,173               | 1,483,583 | 24,945,063   | 1,981,109   |
| 1882      | 67                         | 115                    | 1,288              | 687,158                  | 7,591,241               | 1,622,431 | 27,541,212   | 2,155,398   |
| 1883      | 55                         | 170                    | 1,291              | 729,957                  | 7,921,356               | 1,577,086 | 29,336,028   | 2,434,996   |
| 1884      | 78                         | 63                     | 1,400              | 797,950                  | 8,646,188               | 1,830,836 | 30,424,101   | 2,723,794   |
| 1885      | 84                         | 50                     | 1,441              | 850,659                  | 9,211,259               | 1,945,834 | 31,305,910   | 2,988,690   |
| *1886     | ..                         | ..                     | ..                 | ....                     | ....                    | ....      | ....         | ....        |
| Totals .. |                            |                        |                    |                          |                         |           | £367,245,670 | £29,959,561 |

a The Total Number Registered  
b Reduced by 18,278 for 1854, 23,927 for 1865, and 30,921 for 1866, being the number of "Individual Members"  
c Estimated on the basis of the returns made  
d Includes Joint-  
e The return states this sum to be "Investments other than in Trade," which may mean investments in the  
g Estimated. \* The Parliamentary Returns to



## UNITED KINGDOM.

for each Year, from 1862 to 1885 inclusive.

Sources, and Corrected.)

| Trade Expenses. | Trade Stock. | CAPITAL INVESTED IN                                       |                        | Profit Devoted to Education. | Amount of Reserve Fund. | YEAR. |
|-----------------|--------------|-----------------------------------------------------------|------------------------|------------------------------|-------------------------|-------|
|                 |              | Industrial and Provident Societies, and other than Trade. | Joint-stock Companies. |                              |                         |       |
| £               | £            | £                                                         | £                      | £                            | £                       |       |
| 127,749         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1862  |
| 167,620         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1863  |
| 163,147         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1864  |
| 181,766         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1865  |
| 219,746         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1866  |
| 255,923         | 583,539      | d494,429                                                  | ....                   | 3,203                        | 32,629                  | 1867  |
| 294,451         | 671,165      | 137,397                                                   | 166,398                | 3,636                        | 33,109                  | 1868  |
| 230,116         | 784,847      | 117,586                                                   | 178,367                | 3,814                        | 38,630                  | 1869  |
| 311,910         | 912,102      | 126,736                                                   | 204,876                | 4,275                        | 52,990                  | 1870  |
| 346,415         | 1,029,446    | 145,004                                                   | 262,594                | 5,097                        | 66,631                  | 1871  |
| 479,130         | 1,383,063    | 318,477                                                   | 382,846                | 6,696                        | 93,601                  | 1872  |
| 556,540         | 1,627,402    | 370,402                                                   | 449,039                | 7,107                        | 102,722                 | 1873  |
| 594,455         | 1,781,053    | 418,301                                                   | 522,081                | 7,949                        | 116,829                 | 1874  |
| 686,178         | 2,095,675    | 667,825                                                   | 553,454                | 10,879                       | 241,930                 | 1875  |
| 1,279,856       | 2,664,042    | ....                                                      | ....                   | ....                         | ....                    | 1876  |
| 1,381,961       | 2,648,282    | ....                                                      | ....                   | ....                         | ....                    | 1877  |
| 1,494,607       | 2,609,729    | ....                                                      | ....                   | ....                         | ....                    | 1878  |
| 1,537,138       | 2,857,214    | ....                                                      | ....                   | ....                         | ....                    | 1879  |
| 1,429,160       | 2,880,076    | e3,447,347                                                | ....                   | 13,910                       | ....                    | 1880  |
| ....            | 3,053,333    | ....                                                      | ....                   | 13,825                       | ....                    | 1881  |
| 1,692,107       | 3,452,942    | e4,281,264                                                | ....                   | 14,778                       | ....                    | 1882  |
| 1,820,804       | 3,709,555    | e4,497,718                                                | ....                   | 16,788                       | ....                    | 1883  |
| 1,936,485       | 3,575,836    | e4,550,890                                                | ....                   | 19,154                       | ....                    | 1884  |
| 2,082,539       | 3,729,492    | e5,433,120                                                | ....                   | 20,712                       | ....                    | 1885  |
| ....            | ....         | ....                                                      | ....                   | ....                         | ....                    | 1886* |

to the end of 1862.

returned by the Wholesale Society, and which were included in the returns from the Retail Societies. to the Central Co-operative Board for 1881.

stock Companies.

Wholesale, Corn Mills, Joint-stock Companies, Building Departments, Banks, Mortgages, Loans, &amp;c. December 31st of this year are not yet issued.

CO-OPERATIVE SOCIETIES,  
TABLE (2).—GENERAL SUMMARY of RETURNS  
(Compiled from Official

| YEAR.    | NUMBER OF SOCIETIES     |                     |                 | Number of Members. | CAPITAL AT END OF YEAR. |           | Sales.       | Net Profit. |
|----------|-------------------------|---------------------|-----------------|--------------------|-------------------------|-----------|--------------|-------------|
|          | Registered in the Year. | Not Making Returns. | Making Returns. |                    | Share.                  | Loan.     |              |             |
|          |                         |                     |                 |                    | £                       | £         | £            | £           |
| 1862     | a454                    | g68                 | 332             | 90,341             | 428,376                 | 54,499    | 2,333,523    | 165,562     |
| 1863     | 51                      | 73                  | 381             | 111,163            | 579,902                 | 76,738    | 2,673,778    | 216,005     |
| 1864     | 146                     | 110                 | 394             | b129,429           | 684,182                 | 89,122    | 2,836,606    | 224,460     |
| 1865     | 101                     | 182                 | 403             | b124,659           | 819,367                 | 107,263   | 3,373,847    | 279,226     |
| 1866     | 163                     | 240                 | 441             | b144,072           | 1,046,310               | 118,023   | 4,462,676    | 372,307     |
| 1867     | 137                     | 192                 | 577             | 171,897            | 1,475,199               | 136,734   | 6,001,153    | 398,578     |
| 1868     | 190                     | 93                  | 673             | 211,781            | 1,711,643               | 177,706   | 7,122,360    | 424,420     |
| 1869     | 65                      | 133                 | 754             | 229,861            | 1,816,672               | 179,054   | 7,353,363    | 438,101     |
| 1870     | 67                      | 153                 | 748             | 248,108            | 2,035,626               | 197,029   | 8,201,685    | 553,435     |
| 1871     | 56                      | 235                 | 746             | 262,188            | 2,305,951               | 215,453   | 9,463,771    | 666,399     |
| 1872     | 138                     | 104                 | 927             | 339,986            | 2,968,758               | 371,531   | 12,992,345   | 935,551     |
| 1873     | 225                     | 135                 | 978             | 387,301            | 3,579,962               | 496,740   | 15,623,553   | 1,109,795   |
| 1874     | 128                     | 227                 | 1,026           | 412,252            | 3,903,608               | 586,972   | 16,358,278   | 1,227,226   |
| 1875     | 116                     | 283                 | 1,163           | 479,284            | 4,793,909               | 844,620   | 18,484,382   | 1,427,365   |
| 1876     | 82                      | 170                 | 1,165           | 507,857            | 5,140,219               | 919,762   | 19,909,699   | 1,742,501   |
| 1877     | 66                      | 240                 | 1,144           | 528,576            | 5,437,959               | 1,073,265 | 21,374,013   | 1,922,361   |
| 1878     | 52                      | 119                 | 1,181           | 560,703            | 5,645,883               | 1,145,707 | 21,385,646   | 1,836,371   |
| 1879     | 51                      | 146                 | 1,145           | 573,084            | 5,747,907               | 1,496,143 | 20,365,602   | 1,856,308   |
| 1880     | 67                      | 100                 | 1,177           | 603,541            | 6,224,271               | 1,341,190 | 23,231,677   | c1,866,839  |
| 1881     | 62                      | ..                  | 1,230           | 642,783            | 6,937,284               | 1,483,583 | 24,926,005   | 1,979,576   |
| 1882     | 66                      | 113                 | 1,276           | 685,981            | 7,581,739               | 1,622,253 | 27,509,055   | 2,153,699   |
| 1883     | 55                      | 165                 | 1,282           | 728,905            | 7,912,216               | 1,576,845 | 29,303,441   | 2,432,621   |
| 1884     | 76                      | 57                  | 1,391           | 896,845            | 8,636,960               | 1,830,624 | 30,392,112   | 2,722,103   |
| 1885     | 84                      | 47                  | 1,431           | 849,616            | 9,202,138               | 1,945,508 | 31,273,156   | 2,986,155   |
| *1886    | ..                      | ..                  | ..              | ....               | ....                    | ....      | ....         | ....        |
| Totals.. |                         |                     |                 |                    |                         |           | £366,951,726 | £29,936,964 |

a The Total Number Registered

b Reduced by 18,278 for 1864, 23,927 for 1865, and 30,921 for 1866, being the number of "Individual Members"

c Estimated on the basis of the returns made

d Includes Joint-

e The return states this sum to be "Investments other than in Trade," which may mean investments in the

\* The Parliamentary Returns to December 31st



## GREAT BRITAIN.

for each Year, from 1862 to 1885 inclusive.

Sources, and Corrected.)

| Trade Expenses. | Trade Stock. | CAPITAL INVESTED IN                                       |                        | Profit Devoted to Education. | Amount of Reserve Fund. | YEAR. |
|-----------------|--------------|-----------------------------------------------------------|------------------------|------------------------------|-------------------------|-------|
|                 |              | Industrial and Provident Societies, and other than Trade. | Joint-stock Companies. |                              |                         |       |
| £               | £            | £                                                         | £                      | £                            | £                       |       |
| 127,749         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1862  |
| 167,620         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1863  |
| 163,147         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1864  |
| 181,766         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1865  |
| 219,746         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1866  |
| 255,923         | 583,539      | d494,429                                                  | ....                   | 3,203                        | 32,629                  | 1867  |
| 294,451         | 671,165      | 137,397                                                   | 166,398                | 3,636                        | 33,109                  | 1868  |
| 280,116         | 784,847      | 117,586                                                   | 178,367                | 3,814                        | 38,630                  | 1869  |
| 311,910         | 912,102      | 126,736                                                   | 204,876                | 4,275                        | 52,990                  | 1870  |
| 346,415         | 1,029,446    | 145,004                                                   | 262,594                | 5,097                        | 66,631                  | 1871  |
| 477,846         | 1,383,063    | 318,477                                                   | 382,846                | 6,696                        | 93,601                  | 1872  |
| 555,766         | 1,627,402    | 370,402                                                   | 449,039                | 7,107                        | 102,722                 | 1873  |
| 593,548         | 1,781,053    | 418,301                                                   | 522,081                | 7,949                        | 116,829                 | 1874  |
| 685,118         | 2,094,325    | 667,825                                                   | 553,454                | 10,879                       | 241,930                 | 1875  |
| 1,279,392       | 2,664,042    | ....                                                      | ....                   | ....                         | ....                    | 1876  |
| 1,381,285       | 2,647,309    | ....                                                      | ....                   | ....                         | ....                    | 1877  |
| 1,493,842       | 2,609,729    | ....                                                      | ....                   | ....                         | ....                    | 1878  |
| 1,536,282       | 2,857,214    | ....                                                      | ....                   | ....                         | ....                    | 1879  |
| 1,428,303       | 2,878,832    | e3,429,935                                                | 17,407                 | 13,910                       | ....                    | 1880  |
| ....            | 3,051,665    | ....                                                      | ....                   | 13,822                       | ....                    | 1881  |
| 1,689,823       | 3,450,481    | e4,281,243                                                | ....                   | 14,778                       | ....                    | 1882  |
| 1,818,880       | 3,706,978    | e4,490,477                                                | ....                   | 16,788                       | ....                    | 1883  |
| 1,933,297       | 3,572,226    | 4,543,388                                                 | ....                   | 19,154                       | ....                    | 1884  |
| 2,080,427       | 3,726,756    | 5,425,319                                                 | ....                   | 20,712                       | ....                    | 1885  |
| ....            | ....         | ....                                                      | ....                   | ....                         | ....                    | 1886* |

to the end of 1862.

returned by the Wholesale Society, and which were included in the returns from the Retail Societies. to the Central Co-operative Board for 1881.

stock Companies.

Wholesale, Corn Mills, Joint-stock Companies, Building Departments, Banks, Mortgages, Loans, &amp;c. of this year are not yet issued.

## CO-OPERATIVE SOCIETIES,

TABLE (3).—GENERAL SUMMARY of RETURNS

(Compiled from Official

| YEAR.     | NUMBER OF SOCIETIES        |                        |                    | Number<br>of<br>Members. | CAPITAL.  |           | Sales.       | Net Profit. |
|-----------|----------------------------|------------------------|--------------------|--------------------------|-----------|-----------|--------------|-------------|
|           | Registered<br>in the Year. | Not Making<br>Returns. | Making<br>Returns. |                          | Share.    | Loan.     |              |             |
|           |                            |                        |                    |                          | £         | £         | £            | £           |
| 1862      | 454                        | 68                     | 332                | 90,341                   | 428,376   | 54,499    | 2,333,523    | 165,562     |
| 1863      | 51                         | 73                     | 381                | 111,163                  | 579,902   | 76,738    | 2,673,778    | 216,005     |
| 1864      | 146                        | 110                    | 394                | 129,429                  | 684,182   | 89,122    | 2,836,606    | 224,460     |
| 1865      | 101                        | 182                    | 403                | 124,659                  | 819,367   | 107,263   | 3,373,847    | 279,226     |
| 1866      | 163                        | 240                    | 441                | 144,072                  | 1,046,310 | 118,023   | 4,462,676    | 372,307     |
| 1867      | 137                        | 192                    | 577                | 171,897                  | 1,475,199 | 136,734   | 6,001,153    | 398,578     |
| 1868      | 190                        | 93                     | 673                | 211,781                  | 1,711,643 | 177,706   | 7,122,360    | 424,420     |
| 1869      | 65                         | 133                    | 754                | 229,861                  | 1,816,672 | 179,054   | 7,353,363    | 438,101     |
| 1870      | 67                         | 153                    | 748                | 248,108                  | 2,035,626 | 197,029   | 8,201,685    | 553,435     |
| 1871      | 56                         | 235                    | 746                | 262,188                  | 2,305,951 | 215,453   | 9,463,771    | 666,399     |
| 1872      | 113                        | 66                     | 749                | 301,157                  | 2,786,965 | 344,509   | 11,397,225   | 809,237     |
| 1873      | 186                        | 69                     | 790                | 340,930                  | 3,344,104 | 431,808   | 13,651,127   | 959,493     |
| 1874      | 113                        | 177                    | 810                | 357,821                  | 3,653,582 | 498,052   | 14,295,762   | 1,072,139   |
| 1875      | 98                         | 237                    | 926                | 420,024                  | 4,470,857 | 742,073   | 16,206,570   | 1,250,570   |
| 1876      | 72                         | 113                    | 937                | 444,547                  | 4,825,642 | 774,809   | 17,619,247   | 1,541,384   |
| 1877      | 53                         | 186                    | 896                | 461,666                  | 5,092,958 | 916,955   | 18,697,788   | 1,680,370   |
| 1878      | 48                         | 65                     | 963                | 490,584                  | 5,264,855 | 965,499   | 18,719,081   | 1,583,925   |
| 1879      | 40                         | 106                    | 937                | 504,117                  | 5,374,179 | 1,324,970 | 17,816,037   | 1,598,156   |
| 1880      | 53                         | 62                     | 953                | 526,686                  | 5,806,545 | 1,124,795 | 20,129,217   | 1,600,000   |
| 1881      | 50                         | ..                     | 971                | 552,353                  | 6,431,553 | 1,205,145 | 21,276,850   | 1,657,564   |
| 1882      | 51                         | 82                     | 1,012              | 593,262                  | 7,058,025 | 1,293,595 | 23,607,809   | 1,814,375   |
| 1883      | 42                         | 158                    | 990                | 622,871                  | 7,281,448 | 1,203,764 | 24,776,980   | 2,036,826   |
| 1884      | 64                         | 48                     | 1,079              | 672,780                  | 7,879,686 | 1,359,007 | 25,600,250   | 2,237,210   |
| 1885      | 73                         | 47                     | 1,114              | 717,019                  | 8,364,367 | 1,408,941 | 25,858,065   | 2,419,615   |
| *1886     | ..                         | ..                     | ..                 | ....                     | ....      | ....      | ....         | ....        |
| Totals .. |                            |                        |                    |                          |           |           | £323,474,770 | £25,999,357 |

\* The Parliamentary Returns to December 31st of this year are not yet issued.



## ENGLAND AND WALES.

*for each Year, from 1862 to 1885 inclusive.*

Sources, and Corrected.)

| Trade Expenses. | Trade Stock. | CAPITAL INVESTED IN                                       |                        | Profit Devoted to Education. | Amount of Reserve Fund. | YEAR. |
|-----------------|--------------|-----------------------------------------------------------|------------------------|------------------------------|-------------------------|-------|
|                 |              | Industrial and Provident Societies, and other than Trade. | Joint-stock Companies. |                              |                         |       |
| £               | £            | £                                                         | £                      | £                            | £                       |       |
| 127,749         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1862  |
| 167,620         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1863  |
| 163,147         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1864  |
| 181,766         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1865  |
| 219,746         | ....         | ....                                                      | ....                   | ....                         | ....                    | 1866  |
| 255,923         | 583,539      | 494,429                                                   | ....                   | 3,203                        | 32,629                  | 1867  |
| 294,451         | 671,165      | 137,397                                                   | 166,398                | 3,636                        | 33,109                  | 1868  |
| 280,116         | 784,847      | 117,586                                                   | 178,367                | 3,814                        | 38,630                  | 1869  |
| 311,910         | 912,102      | 126,736                                                   | 204,876                | 4,275                        | 52,990                  | 1870  |
| 346,415         | 1 029,446    | 145,004                                                   | 262,594                | 5,097                        | 66,631                  | 1871  |
| 419,567         | 1,219,092    | 300,712                                                   | 380,043                | 6,461                        | 79,292                  | 1872  |
| 488,464         | 1,439,137    | 337,811                                                   | 443,724                | 6,864                        | 83,149                  | 1873  |
| 517,445         | 1,572,264    | 386,640                                                   | 510,057                | 7,486                        | 98,732                  | 1874  |
| 598,080         | 1,852,437    | 636,400                                                   | 538,140                | 10,454                       | 220,011                 | 1875  |
| 1,137,053       | 2,377,380    | ....                                                      | ....                   | ....                         | ....                    | 1876  |
| 1,222,664       | 2,310,041    | ....                                                      | ....                   | ....                         | ....                    | 1877  |
| 1,315,364       | 2,286,795    | ....                                                      | ....                   | ....                         | ....                    | 1878  |
| 1,353,832       | 2,486,704    | ....                                                      | ....                   | ....                         | ....                    | 1879  |
| 1,285,875       | 2,512,039    | †3,226,370                                                | ....                   | 13,262                       | ....                    | 1880  |
| ....            | 2,585,443    | ....                                                      | ....                   | 13,314                       | ....                    | 1881  |
| 1,499,633       | 2,969,957    | †3,919,455                                                | ....                   | 14,070                       | ....                    | 1882  |
| 1,606,424       | 3,160,569    | †4,113,995                                                | ....                   | 15,903                       | ....                    | 1883  |
| 1,684,070       | 2,932,817    | †4,118,751                                                | ....                   | 18,062                       | ....                    | 1884  |
| 1,825,717       | 3,044,534    | †4,811,819                                                | ....                   | 19,374                       | ....                    | 1885  |
| ....            | ....         | ....                                                      | ....                   | ....                         | ....                    | 1886* |

† "Investments at end of year"—the class not stated.

## CO-OPERATIVE

TABLE (4).--GENERAL SUMMARY of RETURNS

(Compiled from Official

| YEAR.       | NO. OF SOCIETIES |                           |                    | Number<br>of<br>Members. | CAPITAL AT END OF<br>YEAR. |             |
|-------------|------------------|---------------------------|--------------------|--------------------------|----------------------------|-------------|
|             | Regis-<br>tered. | Not<br>Making<br>Returns. | Making<br>Returns. |                          | Share.                     | Loan.       |
| 1872 .....  | 25               | 38                        | 178                | 38,829                   | £<br>181,793               | £<br>27,022 |
| 1873 .....  | 39               | 66                        | 188                | 46,371                   | 235,858                    | 64,932      |
| 1874 .....  | 15               | 50                        | 216                | 54,431                   | 250,026                    | 88,920      |
| 1875 .....  | 18               | 46                        | 237                | 59,260                   | 323,052                    | 102,547     |
| 1876 .....  | 10               | 57                        | 228                | 63,310                   | 314,577                    | 144,953     |
| 1877 .....  | 8                | 54                        | 248                | 66,910                   | 345,001                    | 156,310     |
| 1878 .....  | 4                | 54                        | 218                | 70,119                   | 381,028                    | 180,208     |
| 1879 .....  | 11               | *40                       | 208                | 68,967                   | 373,728                    | 171,173     |
| 1880 .....  | 14               | 38                        | 224                | 76,855                   | 417,726                    | 216,395     |
| 1881 .....  | 12               | 9                         | 259                | 90,430                   | 505,731                    | 278,438     |
| 1882 .....  | 15               | 31                        | 264                | 92,719                   | 523,714                    | 328,658     |
| 1883 .....  | 13               | 7                         | 292                | 106,034                  | 630,768                    | 373,081     |
| 1884 .....  | 12               | 9                         | 312                | 124,065                  | 757,274                    | 471,617     |
| 1885 .....  | 11               | ..                        | 317                | 132,597                  | 837,771                    | 536,567     |
| †1886 ..... | ..               | ..                        | ..                 | ..                       | ..                         | ..          |
|             |                  |                           |                    |                          |                            | Totals...£  |

\* Not stated, but estimated at about 40.

† The Parliamentary Returns to December 31st



## SOCIETIES, SCOTLAND. . . .

for each Year, from 1872 to 1885 inclusive.

Sources, and Corrected.)

| Sales.     | Net Profit. | Trade Expenses. | Trade Stock. | CAPITAL INVESTED IN                                     |                        | Profit Devoted to Education. | Amount of Reserve Fund. | YEAR.   |
|------------|-------------|-----------------|--------------|---------------------------------------------------------|------------------------|------------------------------|-------------------------|---------|
|            |             |                 |              | Industrial and Provident Societies and other than Trade | Joint-stock Companies. |                              |                         |         |
| £          | £           | £               | £            | £                                                       | £                      | £                            | £                       |         |
| 1,595,120  | 126,314     | 58,279          | 163,971      | 17,765                                                  | 2,803                  | 235                          | 14,309                  | ..1872  |
| 1,972,426  | 150,302     | 67,302          | 188,265      | 32,591                                                  | 5,315                  | 243                          | 19,573                  | ..1873  |
| 2,062,516  | 155,087     | 76,103          | 208,789      | 31,661                                                  | 12,024                 | 463                          | 18,097                  | ..1874  |
| 2,277,812  | 176,795     | 87,038          | 241,888      | 31,425                                                  | 15,314                 | 425                          | 21,919                  | ..1875  |
| 2,290,452  | 201,117     | 142,339         | 286,662      | ..                                                      | ..                     | ..                           | ..                      | ..1876  |
| 2,676,225  | 241,991     | 158,621         | 337,268      | ..                                                      | ..                     | ..                           | ..                      | ..1877  |
| 2,666,565  | 252,446     | 178,478         | 322,934      | ..                                                      | ..                     | ..                           | ..                      | ..1878  |
| 2,549,565  | 258,152     | 182,450         | 370,510      | ..                                                      | ..                     | ..                           | ..                      | ..1879  |
| 3,102,460  | 266,839     | 142,428         | 366,793      | 203,565                                                 | 17,407                 | 648                          | ..                      | ..1880  |
| 3,649,155  | 322,012     | ..              | 466,222      | ..                                                      | ..                     | 508                          | ..                      | ..1881  |
| 3,901,246  | 339,324     | 190,190         | 480,524      | †361,788                                                | ..                     | 708                          | ..                      | ..1882  |
| 4,526,461  | 395,795     | 212,456         | 546,409      | †376,482                                                | ..                     | 885                          | ..                      | ..1883  |
| 4,791,862  | 484,893     | 249,227         | 639,409      | †424,637                                                | ..                     | 1,092                        | ..                      | ..1884  |
| 5,415,091  | 566,540     | 254,710         | 682,222      | †613,500                                                | ..                     | 1,338                        | ..                      | ..1885  |
| ..         | ..          | ..              | ..           | ..                                                      | ..                     | ..                           | ..                      | ..1886† |
| 43,476,956 | 3,937,607   |                 |              |                                                         |                        |                              |                         |         |

† "Investments at end of year;" the class of investment is not stated. of this year are not yet issued.

## CO-OPERATIVE SOCIETIES, IRELAND.

TABLE (5).—GENERAL SUMMARY OF RETURNS for each Year, from 1872 to 1885 inclusive.  
(Compiled from Official Sources, and Corrected.)

| YEAR.      | NUMBER OF SOCIETIES. |                     |                 | Number of Members. | CAPITAL AT END OF YEAR. |         | Sales. | Net Profit. | Trade Expenses. | Trade Stock. | CAPITAL INVESTED IN |      | Profit Devoted to Education. | Amount of Reserve Fund. |
|------------|----------------------|---------------------|-----------------|--------------------|-------------------------|---------|--------|-------------|-----------------|--------------|---------------------|------|------------------------------|-------------------------|
|            | Registered.          | Not Making Returns. | Making Returns. |                    | Share.                  | Loan.   |        |             |                 |              |                     |      |                              |                         |
|            |                      |                     |                 |                    |                         |         |        |             |                 |              |                     |      |                              |                         |
| 1872.....  | 3                    | 9                   | 8               | 564                | £ 1,815                 | £ 10    | 19,775 | £ 1,164     | £ 1,284         | £ ..         | £ ..                | £ .. | £ ..                         | £ ..                    |
| 1873.....  | 1                    | 3                   | 5               | 464                | 1,443                   | 90      | 16,161 | 863         | 774             | ..           | ..                  | ..   | ..                           | ..                      |
| 1874.....  | 2                    | 5                   | 5               | 481                | 1,485                   | 370     | 15,775 | 812         | 907             | ..           | ..                  | ..   | ..                           | ..                      |
| 1875.....  | 1                    | 2                   | 7               | 792                | 9,638                   | 5,370   | 15,519 | 1,725       | 1,060           | 1,350        | ..                  | ..   | ..                           | 67                      |
| 1876.....  | ..                   | 7                   | 2               | 210                | 1,171                   | 10      | 11,355 | 1,479       | 464             | ..           | ..                  | ..   | ..                           | ..                      |
| 1877.....  | 1                    | 6                   | 4               | 505                | 7,490                   | 10      | 16,434 | 2,190       | 676             | 973          | ..                  | ..   | ..                           | ..                      |
| 1878.....  | ..                   | 2                   | 4               | 290                | 1,560                   | 10      | 16,573 | 1,289       | 765             | ..           | ..                  | ..   | ..                           | 15                      |
| 1879.....  | 1                    | ..                  | 6               | 537                | 7,615                   | 200     | 17,170 | 1,482       | 856             | ..           | ..                  | ..   | 45                           | 71                      |
| 1880.....  | 2                    | ..                  | 6               | 522                | 7,822                   | 100     | 16,637 | 1,760       | 857             | 1,244        | ..                  | ..   | ..                           | ..                      |
| 1881.....  | 4                    | ..                  | 10              | 834                | 2,889                   | ..      | 19,058 | 1,533       | 1,039           | 1,668        | ..                  | ..   | 3                            | ..                      |
| 1882.....  | 1                    | 2                   | 12              | 1,177              | 9,502                   | 178     | 32,157 | 1,699       | 2,284           | 2,461        | ..                  | ..   | ..                           | ..                      |
| 1883.....  | ..                   | 5                   | 9               | 1,052              | 9,140                   | 241     | 32,587 | 2,375       | 1,924           | 2,577        | ..                  | ..   | ..                           | ..                      |
| 1884.....  | 2                    | 6                   | 9               | 1,105              | 9,228                   | 212     | 31,989 | 1,691       | 3,188           | 3,610        | ..                  | ..   | ..                           | ..                      |
| 1885.....  | ..                   | 3                   | 10              | 1,043              | 9,121                   | 326     | 32,754 | 2,535       | 2,112           | 2,736        | ..                  | ..   | ..                           | ..                      |
| *1886..... | ..                   | ..                  | ..              | ..                 | ..                      | ..      | ..     | ..          | ..              | ..           | ..                  | ..   | ..                           | ..                      |
|            |                      |                     |                 |                    | Totals..£               | 293,944 |        | £22,597     |                 |              |                     |      |                              |                         |

\* The Parliamentary Returns to December 31st of this year are not yet issued.

† "Investments at end of year;" the class not stated.



## CO-OPERATIVE SOCIETIES IN ENGLAND AND WALES WITH AN ANNUAL TRADE OF OVER £200,000.

*(See Table 6, pages 366-7.)*

THE number of societies coming under this head is now seventeen, of which eight are in Lancashire, five in Yorkshire, two in Durham, and one each in Middlesex and Northumberland. This number shows an increase of one on the year.

The combined sales of these seventeen societies amount to £11,109,589, being 43 per cent of the entire sales of societies in England and Wales. The Wholesale Society comes first with a business of £5,223,179, and is followed by the Civil Service Supply, with sales amounting to £1,743,306; next come Leeds Society and Corn Mill, Newcastle-on-Tyne, Sowerby Bridge Corn Mill, Bolton, and Oldham Industrial Societies, all of whose sales considerably exceed £300,000. The sales of the remaining ten societies are under that sum.

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## CO-OPERATIVE SOCIETIES IN ENGLAND AND WALES WITH AN ANNUAL TRADE OF BETWEEN £100,000 AND £200,000.

*(See Table 7, page 368.)*

FIVE fresh societies make their appearance in table 7 this year, viz., Burnley, with a trade of £125,215, Radcliffe and Pilkington £102,090, Batley £102,795, Gloucester £110,867, and Stratford £103,370; whilst Halifax Corn Mill is transferred from table 6, its sales having decreased from £203,877 in 1885 to £192,217 in 1886.

Of the twenty-nine societies coming under this head for 1886, Lancashire furnishes nine, Yorkshire eight, Durham four, and Cumberland, Cheshire, Leicestershire, Devonshire, Derbyshire, Lincolnshire, Essex, Gloucestershire one each. Their total sales are £3,837,214, or nearly 15 per cent of the total sales of societies in England and Wales.

## CO-OPERATIVE SOCIETIES,

BIRD'S-EYE VIEW

TABLE (6), showing the Sales of all Societies which,

| NAMES OF SOCIETIES. |                                  | COUNTIES.    | 1867      | 1868      | 1869      |
|---------------------|----------------------------------|--------------|-----------|-----------|-----------|
|                     |                                  |              | £         | £         | £         |
| 1                   | Rochdale Equitable Pioneers..    | Lancashire.. | 283,942   | 290,540   | 236,439   |
| 2                   | Rochdale Co-op. Corn Mill....    | —            | 386,867   | 326,659   | 235,823   |
| 3                   | Co-operative Wholesale Society   | —            | 331,744   | 412,240   | 507,217   |
| 4                   | Civil Service Supply Association | Middlesex .. | ....      | 217,283   | 345,390   |
| 5                   | Sowerby Bridge Corn Mill....     | Yorkshire .. | ....      | ....      | ....      |
| 6                   | Halifax Industrial .....         | —            | ....      | ....      | ....      |
| 7                   | Leeds Industrial and Corn Mill.  | —            | ....      | ....      | ....      |
| 8                   | Oldham Industrial .....          | Lancashire.. | ....      | ....      | ....      |
| 9                   | Bury District .....              | —            | ....      | ....      | ....      |
| 10                  | Rochdale Cotton Manufact'ring    | —            | ....      | ....      | ....      |
| 11                  | Halifax Corn Mill .....          | Yorkshire .. | ....      | ....      | ....      |
| TOTALS.....         |                                  |              | 1,002,553 | 1,246,722 | 1,324,869 |

| NAMES OF SOCIETIES. |                                  | COUNTIES.    | 1877      | 1878      | 1879      |
|---------------------|----------------------------------|--------------|-----------|-----------|-----------|
|                     |                                  |              | £         | £         | £         |
| 1                   | Rochdale Equitable Pioneers..    | Lancashire.. | 311,715   | 299,039   | 270,070   |
| 2                   | Rochdale Co-op. Corn Mill....    | —            | 252,045   | 285,920   | 270,337   |
| 3                   | Co-operative Wholesale Society   | —            | 2,827,052 | 2,705,625 | 2,645,331 |
| 4                   | Civil Service Supply Association | Middlesex .. | 946,780   | 1,384,042 | 1,474,923 |
| 5                   | Sowerby Bridge Corn Mill....     | Yorkshire .. | 460,013   | 468,001   | 447,301   |
| 6                   | Halifax Industrial .....         | —            | 237,447   | 209,571   | ....      |
| 7                   | Leeds Industrial and Corn Mill   | —            | 374,166   | 358,865   | 360,017   |
| 8                   | Oldham Industrial .....          | Lancashire.. | 316,903   | 279,999   | 261,813   |
| 9                   | Bury District .....              | —            | 251,057   | 241,886   | 217,282   |
| 10                  | Rochdale Cotton Manufactng..     | —            | ....      | ....      | ....      |
| 11                  | Halifax Corn Mill .....          | Yorkshire .. | 244,262   | 224,018   | ....      |
| 12                  | Oldham Star Corn Mill .....      | Lancashire.. | 219,664   | ....      | ....      |
| 13                  | Manchester Equitable.....        | —            | ....      | ....      | 208,513   |
| 14                  | Bolton .....                     | —            | ....      | ....      | ....      |
| 15                  | Gateshead, Durham .....          | Durham....   | ....      | ....      | ....      |
| 16                  | Barnsley British .....           | Yorkshire .. | ....      | ....      | ....      |
| 17                  | Oldham Equitable .....           | Lancashire.. | ....      | ....      | ....      |
| 18                  | Huddersfield.....                | Yorkshire .. | ....      | ....      | ....      |
| 19                  | Newcastle-upon-Tyne .....        | Nrthmberlnd  | ....      | ....      | ....      |
| 20                  | Accrington and Church .....      | Lancashire.. | ....      | ....      | ....      |
| 21                  | Bishop Auckland.....             | Durham....   | ....      | ....      | ....      |
| TOTALS.....         |                                  |              | 6,441,104 | 6,456,966 | 6,155,587 |



## ENGLAND AND WALES.

OF SALES.

*during the years 1867 to 1886, exceeded £200,000 a year.*

| 1870      | 1871      | 1872      | 1873      | 1874      | 1875      | 1876      |    |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|
| £         | £         | £         | £         | £         | £         | £         |    |
| 222,138   | 246,674   | 267,572   | 287,212   | 298,889   | 305,657   | 305,191   | 1  |
| ....      | ....      | 215,584   | 240,836   | 244,864   | 202,988   | ....      | 2  |
| 677,734   | 758,764   | 1,153,132 | 1,636,950 | 1,964,829 | 2,247,395 | 2,697,366 | 3  |
| 492,418   | 625,305   | 712,399   | 819,428   | 896,094   | 925,332   | 983,545   | 4  |
| ....      | 206,979   | 218,645   | 286,964   | 338,246   | 338,364   | 406,017   | 5  |
| ....      | ....      | 235,730   | 264,137   | 273,186   | 270,499   | 237,754   | 6  |
| ....      | ....      | ....      | 312,308   | 386,536   | 390,645   | 365,639   | 7  |
| ....      | ....      | ....      | 213,600   | 237,845   | 253,438   | 284,977   | 8  |
| ....      | ....      | ....      | 209,382   | 223,622   | 212,814   | 231,692   | 9  |
| ....      | ....      | ....      | ....      | 209,654   | ....      | ....      | 10 |
| ....      | ....      | ....      | ....      | ....      | ....      | 207,648   | 11 |
| 1,392,290 | 1,837,722 | 2,803,062 | 4,270,817 | 5,073,765 | 5,147,132 | 5,719,829 |    |

| 1880      | 1881      | 1882      | 1883       | 1884       | 1885       | 1886       |    |
|-----------|-----------|-----------|------------|------------|------------|------------|----|
| £         | £         | £         | £          | £          | £          | £          |    |
| 283,655   | 272,141   | 274,627   | 276,457    | 262,270    | 252,072    | 246,031    | 1  |
| 301,836   | 299,672   | 286,966   | 259,396    | 209,912    | ....       | ....       | 2  |
| 3,339,681 | 3,574,095 | 4,038,238 | 4,546,891  | 4,675,371  | 4,793,151  | 5,223,179  | 3  |
| 1,420,619 | 1,488,507 | 1,603,670 | 1,682,655  | 1,691,455  | 1,758,648  | 1,743,306  | 4  |
| 565,194   | 589,929   | 594,664   | 499,260    | 395,502    | 343,723    | 333,655    | 5  |
| 207,539   | ....      | ....      | 206,058    | 224,780    | 226,175    | 224,870    | 6  |
| 412,225   | 432,811   | 438,478   | 486,784    | 490,332    | 495,297    | 480,204    | 7  |
| 303,012   | 310,387   | 320,336   | 335,672    | 344,647    | 330,038    | 312,230    | 8  |
| 231,918   | 225,689   | 240,227   | 250,123    | 249,978    | 256,545    | 240,239    | 9  |
| ....      | ....      | ....      | ....       | ....       | ....       | ....       | 10 |
| ....      | ....      | ....      | ....       | 240,363    | 203,877    | ....       | 11 |
| ....      | ....      | ....      | ....       | ....       | ....       | ....       | 12 |
| 242,966   | 242,535   | 254,124   | 258,935    | 240,241    | 232,998    | 229,886    | 13 |
| ....      | 219,657   | 254,414   | 295,437    | 326,201    | 324,467    | 335,877    | 14 |
| ....      | 200,261   | 225,202   | 248,364    | 248,295    | 268,720    | 269,585    | 15 |
| ....      | ....      | 215,421   | 253,512    | 266,616    | 260,112    | 283,903    | 16 |
| ....      | ....      | 210,581   | 235,678    | 239,364    | 227,873    | 228,946    | 17 |
| ....      | ....      | 201,718   | 208,710    | ....       | ....       | 209,426    | 18 |
| ....      | ....      | ....      | 239,877    | 286,686    | 312,719    | 338,030    | 19 |
| ....      | ....      | ....      | ....       | 200,608    | 208,307    | 209,291    | 20 |
| ....      | ....      | ....      | ....       | ....       | ....       | 200,931    | 21 |
| 7,308,645 | 7,855,684 | 9,158,666 | 10,283,809 | 10,592,621 | 10,494,722 | 11,109,589 |    |

## CO-OPERATIVE SOCIETIES.—ENGLAND AND WALES.

## BIRD'S-EYE VIEW OF SALES.

TABLE (7), showing the SALES of all SOCIETIES which during the years 1883 to 1886 were over £100,000 and under £200,000 a year; also SALES of the same SOCIETIES for the year 1876.

| No. | NAME OF SOCIETY.        | COUNTY.        | 1876.     | 1883.      | 1884.     | 1885.     | 1886.     |
|-----|-------------------------|----------------|-----------|------------|-----------|-----------|-----------|
|     |                         |                | £         | £          | £         | £         | £         |
| 1   | Accrington and Church.  | Lancashire ..  | 177,163   | 199,990    | (over)    | (over)    | (over)    |
| 2   | Bacup .....             | " ..           | 138,006   | 122,225    | 109,561   | ....      | ....      |
| 3   | Leigh .....             | " ..           | 138,118   | 116,635    | 116,293   | 109,903   | 107,695   |
| 4   | Failsworth .....        | " ..           | 61,445    | 113,913    | 117,815   | 111,469   | 104,499   |
| 5   | Eccles .....            | " ..           | 128,999   | 105,366    | 109,225   | 114,814   | 120,839   |
| 6   | Oldham Star Corn Mill.  | " ..           | 191,278   | 156,377    | 172,922   | 188,949   | 153,913   |
| 7   | Pendleton .....         | " ..           | 37,003    | ....       | ....      | 114,297   | 134,255   |
| 8   | Rochdale Manufact....   | " ..           | 173,163   | No return. | 180,850   | 187,380   | 190,101   |
| 9   | " Co-op. Corn Mill.     | " ..           | 176,671   | ....       | ....      | 192,633   | 166,873   |
| 10  | Huddersfield .....      | Yorkshire ..   | 91,149    | ....       | 195,293   | 181,736   | (over)    |
| 11  | Halifax Flour.....      | " ..           | 207,648   | 186,657    | (over)    | (over)    | 192,217   |
| 12  | " Store .....           | " ..           | 237,754   | (over)     | (over)    | (over)    | (over)    |
| 13  | Keighley .....          | " ..           | 54,022    | ....       | 104,097   | 101,010   | 106,626   |
| 14  | Brighouse .....         | " ..           | 132,345   | 159,824    | 171,620   | 178,360   | 188,355   |
| 15  | Heckmondwike .....      | " ..           | 149,320   | 151,464    | 142,311   | 137,951   | 135,592   |
| 16  | Bradford .....          | " ..           | 90,062    | 150,837    | 141,700   | 136,824   | 146,567   |
| 17  | Dewsbury .....          | " ..           | 126,200   | 139,176    | 137,742   | 138,377   | 145,519   |
| 18  | Todmorden .....         | " ..           | 73,836    | 100,410    | 101,302   | 102,336   | 101,672   |
| 19  | Bishop Auckland ....    | Durham ....    | 93,129    | 165,995    | 199,366   | 198,783   | (over)    |
| 20  | Crook .....             | " ....         | 86,385    | 143,138    | 146,421   | 148,065   | 150,369   |
| 21  | Blaydon .....           | " ....         | 129,997   | 140,330    | 149,152   | 157,850   | 165,770   |
| 22  | Chester-le-Street ....  | " ....         | 83,883    | 112,777    | 124,434   | 130,235   | 148,521   |
| 23  | Haswell .....           | " ....         | 49,219    | 111,053    | 116,507   | 115,342   | 109,021   |
| 24  | Newcastle-on-Tyne ..    | Northmbrlnd.   | 116,841   | (over)     | (over)    | (over)    | (over)    |
| 25  | Cleator Moor .....      | Cumberland..   | 97,213    | 130,445    | 109,529   | 106,213   | 109,734   |
| 26  | Crewe Friendly .....    | Cheshire ....  | 81,958    | 124,505    | 132,374   | 130,554   | 130,530   |
| 27  | Leicester .....         | Leicestershire | 161,198   | 135,336    | 142,368   | 150,711   | 143,362   |
| 28  | Plymouth .....          | Devonshire ..  | 35,670    | 125,551    | 126,091   | 122,989   | 130,559   |
| 29  | Derby .....             | Derbyshire ..  | 76,264    | 103,440    | 104,477   | 110,828   | 109,127   |
| 30  | Lincoln .....           | Lincolnshire.. | 34,456    | ....       | 100,288   | ....      | 102,090   |
| 31  | Burnley .....           | Lancashire ..  | 29,910    | ....       | ....      | ....      | 125,215   |
| 32  | Radcliffe & Pilkington. | " ..           | 83,330    | ....       | ....      | ....      | 101,161   |
| 33  | Batley .....            | Yorkshire ..   | 69,245    | ....       | ....      | ....      | 102,795   |
| 34  | Stratford .....         | Essex .....    | 31,001    | ....       | ....      | ....      | 103,370   |
| 35  | Gloucester.....         | Gloucestersh.  | 52,009    | ....       | ....      | ....      | 110,867   |
|     |                         |                | 3,695,890 | 3,391,034  | 2,995,444 | 3,251,738 | 3,837,214 |



## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

IN the following pages we place before our readers a statement of the capital and trade of co-operative societies compared with their investments in and trade with the Co-operative Wholesale Society for the year 1886, giving the following particulars :—

1. Number of members.
2. Total capital. (a) Share. (b) Loan.
3. Capital invested in the Co-operative Wholesale Society. (a) In shares. (b) On loan.
4. Purchases from the Co-operative Wholesale Society.
5. Total sales.
6. Percentage of purchases from the Co-operative Wholesale Society on the total sales of societies.

In making a comparison as indicated between the total sales of a society and its purchases from the Co-operative Wholesale Society, there are numerous circumstances to be taken into account before it can be said what amount of purchases might have been made from the above-mentioned society. Due allowance must, of course, be made for carriage of goods, expenses, and profit, the amount of which appears in the sales but not in the purchases. Then, again, there is the question of locality; for instance, a society in the immediate neighbourhood of a co-operative corn mill would doubtless purchase the bulk of their flour therefrom, whilst others not so conveniently situated might purchase their flour from the Co-operative Wholesale Society. Further, in agricultural districts societies might find it advantageous to purchase their butter, eggs, bacon, flour, &c., in the local markets.

The total sales of the 849 societies given in our summary amount to £16,887,891, and their purchases from the Co-operative Wholesale Society to £4,704,592, or nearly 28 per cent on the sales. The percentages of Manchester, Newcastle, and London Districts are 25·8, 32·8, and 30·2 respectively.

The following figures show the number of members, the total sales per member, and the purchases per member from the Co-operative Wholesale Society, in each district :—

|                     |      |         | Number<br>of<br>Members. | Sales<br>per<br>Member. |    |    | Purchases<br>from C. W. S.<br>per Member. |       |    |   |   |
|---------------------|------|---------|--------------------------|-------------------------|----|----|-------------------------------------------|-------|----|---|---|
|                     |      |         |                          | £                       | s. | d. | £                                         | s.    | d. |   |   |
| Manchester District | .... | 455,944 | ..                       | 24                      | 14 | 8  | ..                                        | 6     | 7  | 9 |   |
| Newcastle           | „    | ....    | 113,912                  | ..                      | 31 | 18 | 0                                         | ..    | 10 | 9 | 8 |
| London              | „    | ....    | 96,046                   | ..                      | 20 | 11 | 3                                         | ..    | 6  | 4 | 3 |
|                     |      |         |                          | <hr/>                   |    |    |                                           | <hr/> |    |   |   |
|                     |      |         |                          | 665,902                 |    |    |                                           | 7 1 4 |    |   |   |
|                     |      |         |                          | <hr/>                   |    |    |                                           | <hr/> |    |   |   |

The total share and loan capital of the societies comprised in the following statement amount to £7,764,100, of which amount £792,137, or 10·2 per cent, is invested in the Co-operative Wholesale Society in shares or on loan.

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

EXPLANATIONS.—\* Indicates that the figures (except those relating to the Co-operative Wholesale Society) have been extracted from the Central Board Return for 1886. † Registrar's Returns for 1884.

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.

| Number. | NAME.                        | No. of Members at end of Year. | Total Capital at end of Year. |        | Capital Invested with C. W. S. at end of Year. |        | Purchases from C. W. S. during the Year. |         |                |                  |                         | Total Sales during Year. | Per-centage of Pur-chases from C. W. S. on the Total Sales. | Number. |
|---------|------------------------------|--------------------------------|-------------------------------|--------|------------------------------------------------|--------|------------------------------------------|---------|----------------|------------------|-------------------------|--------------------------|-------------------------------------------------------------|---------|
|         |                              |                                | Share.                        | Loan.  | Share.                                         | Loan.  | Grocery & Pro-visions.                   | Drapery | Woollen Cloth. | Books and Shoes. | Furni-ture & Hard-ware. |                          |                                                             |         |
| 1       | MANCHESTER DISTRICT.         |                                |                               |        |                                                |        |                                          |         |                |                  |                         |                          |                                                             |         |
| 2       | LANCASHIRE.                  |                                |                               |        |                                                |        |                                          |         |                |                  |                         |                          |                                                             |         |
| 3       | Accrington.....              | 6,309                          | 132,742                       | 6,736  | 3,250                                          | 25,923 | 71,033                                   | 2,509   | 131            | 2,533            | 699                     | 77,005                   | 36.8                                                        | 1       |
| 4       | *Adlington.....              | 161                            | 1,860                         | 257    | ..                                             | ..     | 554                                      | ..      | ..             | ..               | 37                      | 591                      | 20.3                                                        | 2       |
| 5       | Ainsworth—New Road .....     | 140                            | 1,058                         | 114    | 70                                             | 45     | 347                                      | ..      | ..             | ..               | ..                      | 2,907                    | 8.5                                                         | 3       |
| 6       | " Old Road .....             | 242                            | 2,644                         | ..     | 130                                            | 835    | 1,000                                    | ..      | ..             | 38               | 15                      | 5,332                    | 19.7                                                        | 4       |
| 7       | Ashton-under-Lyne .....      | 1,641                          | 15,340                        | 5,944  | 850                                            | 786    | 15,990                                   | 1,493   | 237            | 521              | 954                     | 18,530                   | 46.2                                                        | 5       |
| 8       | Backbarrow .....             | 135                            | 1,427                         | ..     | 65                                             | 6      | 442                                      | 26      | ..             | ..               | 3                       | 471                      | 18.1                                                        | 6       |
| 9       | Bacup—Conservative .....     | 947                            | 12,143                        | 2,688  | ..                                             | ..     | 382                                      | 22      | ..             | ..               | 34                      | 938                      | 5.3                                                         | 7       |
| 10      | " Rochdale Road .....        | 2,822                          | 50,288                        | 19,800 | 1,570                                          | 20     | 6,217                                    | 242     | ..             | 134              | 275                     | 6,868                    | 7.6                                                         | 8       |
| 11      | Baggsdale .....              | 361                            | 10,577                        | ..     | 175                                            | 315    | 797                                      | ..      | ..             | ..               | ..                      | 7,334                    | 10.8                                                        | 9       |
| 12      | Bamber Bridge .....          | 97                             | 577                           | ..     | ..                                             | ..     | 67                                       | ..      | ..             | 40               | ..                      | 107                      | 1.4                                                         | 10      |
| 13      | Barrowford—Industrial .....  | 237                            | 1,589                         | 382    | 120                                            | 1,496  | 1,877                                    | ..      | 6              | ..               | 10                      | 1,984                    | 27.9                                                        | 11      |
| 14      | " Progressive .....          | 335                            | 3,350                         | 413    | 150                                            | 103    | 8,339                                    | 473     | 146            | 334              | 233                     | 4,525                    | 43.0                                                        | 12      |
| 15      | Barrow-in-Furness .....      | 1,675                          | 9,809                         | ..     | 240                                            | 406    | 8,341                                    | 180     | 1              | 77               | 36                      | 8,635                    | 11.3                                                        | 13      |
| 16      | Bentham .....                | 149                            | 2,077                         | 120    | 95                                             | 23     | 847                                      | ..      | ..             | 20               | 8                       | 375                      | 8.0                                                         | 14      |
| 17      | Billington and Whalley ..... | 150                            | 1,516                         | 160    | 18                                             | ..     | 769                                      | 43      | 4              | 1                | 28                      | 4,700                    | 23.1                                                        | 15      |
| 18      | Blackburn—Bank Top .....     | 533                            | 3,155                         | ..     | ..                                             | ..     | 83                                       | ..      | ..             | ..               | ..                      | 845                      | 6                                                           | 16      |
| 19      | " Blakey Moor .....          | 1,307                          | 9,000                         | ..     | 316                                            | ..     | 4,765                                    | ..      | ..             | ..               | ..                      | 14,215                   | 14.7                                                        | 17      |
| 20      | " Birktongate .....          | 1,204                          | 7,286                         | 7,465  | 305                                            | ..     | 1,589                                    | 41      | ..             | 83               | 20                      | 32,876                   | 5.6                                                         | 18      |
| 21      | " Daisyfield .....           | 1,628                          | 23,210                        | ..     | ..                                             | ..     | 1,292                                    | 27      | ..             | ..               | 6                       | 90,723                   | 2.9                                                         | 19      |
| 22      | " Excelsior .....            | 280                            | 2,837                         | ..     | ..                                             | ..     | 14                                       | ..      | ..             | ..               | 3                       | 44,850                   | 11.607                                                      | 20      |
| 23      | " Grimshaw Park .....        | 1,219                          | 16,849                        | ..     | 600                                            | 806    | 9,160                                    | 254     | ..             | 233              | 55                      | 11,607                   | 37.4                                                        | 21      |
| 24      | " Havelock Street .....      | 745                            | 5,909                         | 100    | ..                                             | ..     | 63                                       | ..      | ..             | ..               | ..                      | 9,702                    | 16,590                                                      | 22      |



|    |                                |        |         |        |       |        |        |       |     |        |     |         |         |      |    |
|----|--------------------------------|--------|---------|--------|-------|--------|--------|-------|-----|--------|-----|---------|---------|------|----|
| 23 | Blackley.....                  | 1,668  | 21,251  | ..     | 807   | 4,724  | 11,735 | 896   | 88  | 200    | 539 | 12,898  | 86,048  | 35.8 | 23 |
| 24 | Blackpool.....                 | 165    | 415     | ..     | 19    | ..     | 1,607  | 4     | ..  | 93     | 88  | 1,682   | 2,710   | 62.0 | 24 |
| 25 | Blackrod.....                  | 184    | 2,109   | ..     | ..    | ..     | 6      | ..    | ..  | ..     | ..  | 6       | 9,282   | ..   | 25 |
| 26 | Bolton.....                    | 12,557 | 178,675 | 3,063  | 6,500 | 18,384 | 92,085 | 5,326 | 271 | 10,588 | 983 | 109,203 | 335,877 | 82.5 | 26 |
| 27 | Bouth.....                     | 60     | 399     | ..     | 9     | ..     | 307    | ..    | ..  | ..     | 7   | 314     | 1,348   | 23.3 | 27 |
| 28 | Brickfield.....                | 411    | 8,760   | ..     | 250   | ..     | 2,403  | ..    | ..  | ..     | 48  | 2,463   | 7,077   | 34.8 | 28 |
| 29 | Brierfield.....                | 426    | 8,524   | ..     | 205   | ..     | 3,796  | 744   | 55  | 218    | 316 | 2,463   | 9,286   | 55.2 | 29 |
| 30 | Brookbottom.....               | 160    | 2,736   | ..     | 900   | ..     | 2,407  | 70    | ..  | ..     | 28  | 2,506   | 7,206   | 84.7 | 30 |
| 31 | Brookton-in-Furness.....       | 272    | 1,444   | 6      | ..    | ..     | 28     | ..    | ..  | ..     | ..  | ..      | 10,528  | ..   | 31 |
| 32 | Burnley.....                   | 4,818  | 40,747  | 366    | 1,615 | 3,083  | 50,962 | 1,690 | ..  | 282    | 395 | 53,329  | 125,215 | 42.6 | 32 |
| 33 | Bury.....                      | 10,152 | 127,321 | ..     | ..    | ..     | 23,949 | 243   | 8   | ..     | 23  | 24,252  | 240,239 | 10.1 | 33 |
| 34 | Carnforth.....                 | 311    | 1,293   | ..     | ..    | ..     | 1,084  | ..    | ..  | ..     | 23  | 1,176   | 6,705   | 17.5 | 34 |
| 35 | Churchtown.....                | 850    | 6,023   | 4,360  | 410   | 69     | 8,803  | 461   | ..  | 297    | 152 | 9,713   | 18,572  | 59.8 | 35 |
| 36 | Clayton-le-Moors.....          | 860    | 14,709  | 948    | 380   | 1,318  | 6,239  | 365   | 1   | 308    | 80  | 6,968   | 25,096  | 27.7 | 36 |
| 37 | Clifton.....                   | 380    | 2,980   | ..     | 2     | ..     | 288    | 161   | ..  | 3      | 55  | 477     | 15,699  | 3.0  | 37 |
| 38 | Clitheroe.....                 | 508    | 4,242   | ..     | ..    | ..     | 956    | 30    | ..  | ..     | 19  | 1,005   | 7,606   | 13.2 | 38 |
| 39 | Clough Fold, Cawl Terrace..... | 470    | 10,574  | 572    | 18    | ..     | 458    | 6     | ..  | ..     | 16  | 1,480   | 11,122  | 4.8  | 39 |
| 40 | Colne and District.....        | 770    | 7,593   | 352    | ..    | ..     | 6,422  | 379   | 50  | 138    | 151 | 7,140   | 16,755  | 42.6 | 40 |
| 41 | Crawshawbooth.....             | 496    | 13,608  | ..     | 255   | 7,563  | 5,929  | 489   | 76  | 150    | 164 | 6,808   | 17,220  | 39.5 | 41 |
| 42 | Crompton.....                  | 1,871  | 22,348  | 2,531  | 930   | 52     | 10,421 | 609   | 120 | 542    | 651 | 12,343  | 55,243  | 22.3 | 42 |
| 43 | Dalton-in-Furness.....         | 2,880  | 34,743  | 6,671  | 1,420 | 926    | 3,836  | 26    | 28  | 101    | 53  | 3,544   | 71,184  | 4.9  | 43 |
| 44 | Dearnley and Featherstall..... | 105    | 1,189   | ..     | ..    | ..     | ..     | ..    | ..  | 12     | ..  | 12      | 3,168   | ..   | 44 |
| 45 | Denton and Haughton.....       | 631    | 8,488   | 107    | 315   | 1,079  | 2,931  | 983   | ..  | 77     | 85  | 3,663   | 16,932  | 21.6 | 45 |
| 46 | Didsbury.....                  | 85     | 1,103   | ..     | 45    | 133    | 1,138  | 3     | 7   | 18     | 13  | 1,179   | 2,123   | 55.5 | 46 |
| 47 | Droylsden.....                 | 2,038  | 22,281  | 68     | 1,020 | 2,248  | 22,153 | 2,060 | 459 | 960    | 594 | 26,226  | 44,860  | 58.4 | 47 |
| 48 | *Eagley Bridge.....            | 414    | 7,650   | 1,731  | 205   | 788    | 2,527  | ..    | ..  | 98     | 61  | 2,626   | 14,927  | 17.6 | 48 |
| 49 | Earlestown.....                | 752    | 6,225   | 131    | 275   | 563    | 2,758  | 899   | 1   | 441    | 204 | 3,803   | 13,523  | 28.1 | 49 |
| 50 | Eccles.....                    | 4,441  | 47,108  | 1,919  | 2,005 | 4,768  | 37,060 | 2,377 | 96  | 2,212  | 790 | 42,475  | 120,839 | 35.1 | 50 |
| 51 | Edenfield.....                 | 220    | 5,983   | ..     | 65    | 102    | 673    | 16    | ..  | 118    | ..  | 807     | 4,809   | 16.8 | 51 |
| 52 | Edgeside Holme.....            | 92     | 1,605   | 1,346  | 23    | ..     | 173    | 5     | ..  | ..     | 7   | 185     | 2,223   | 8.3  | 52 |
| 53 | Edgworth.....                  | 309    | 5,854   | 2,912  | 170   | 4,458  | 3,469  | 443   | 14  | 151    | 65  | 4,142   | 8,306   | 49.8 | 53 |
| 54 | Egerton.....                   | 241    | 846     | ..     | 105   | 173    | 1,416  | 71    | ..  | 12     | 72  | 1,571   | 7,481   | 21.0 | 54 |
| 55 | Fallsworth.....                | 3,848  | 56,347  | 9,314  | 1,995 | 8,994  | 28,463 | 2,584 | 150 | 1,039  | 746 | 32,972  | 104,499 | 31.5 | 55 |
| 56 | Farnworth and Kersley.....     | 2,201  | 23,247  | 72     | 1,100 | 1,954  | 17,107 | 2,404 | 6   | 1,310  | 788 | 21,565  | 73,804  | 29.2 | 56 |
| 57 | Firgrove.....                  | 165    | 4,017   | ..     | 80    | 75     | 1,135  | 25    | ..  | 2      | 39  | 1,201   | 3,893   | 81.4 | 57 |
| 58 | Fleetwood.....                 | 355    | 1,488   | ..     | 122   | ..     | 2,831  | 195   | 13  | 206    | 116 | 3,361   | 6,542   | 51.4 | 58 |
| 59 | Garston and District.....      | 158    | 957     | ..     | 47    | ..     | 1,189  | 12    | ..  | 2      | 51  | 1,254   | 2,100   | 59.7 | 59 |
| 60 | Grange-over-Sands.....         | 149    | 820     | ..     | 31    | ..     | 815    | 4     | ..  | ..     | 19  | 888     | 3,657   | 69.9 | 60 |
| 61 | Great Harwood.....             | 900    | 14,923  | 983    | 435   | 882    | 4,158  | 989   | ..  | ..     | 112 | 4,674   | 28,075  | 16.6 | 61 |
| 62 | Gregson Lane.....              | 149    | 570     | 300    | 60    | 5      | 947    | 88    | ..  | ..     | 19  | 1,004   | 6,074   | 16.5 | 62 |
| 63 | Haslingden—Conservative.....   | 425    | 1,452   | ..     | ..    | ..     | 100    | 1     | ..  | ..     | ..  | 101     | 4,111   | 2.4  | 63 |
| 64 | Haslingden—Industrial.....     | 1,608  | 25,675  | 10,045 | 865   | 415    | 10,900 | 1,248 | 40  | 565    | 267 | 13,020  | 42,465  | 30.6 | 64 |
| 65 | Haughton Green.....            | 489    | 5,890   | ..     | 250   | 323    | 3,124  | 675   | 11  | 236    | 165 | 4,211   | 17,894  | 23.6 | 65 |
| 66 | Hawthhead.....                 | 150    | 896     | 167    | 65    | 40     | 781    | 28    | ..  | 38     | 51  | 808     | 3,624   | 24.8 | 66 |
| 67 | Healey.....                    | 394    | 7,200   | 403    | 250   | 473    | 1,208  | 136   | 18  | 23     | 21  | 1,406   | 12,244  | 11.4 | 67 |
| 68 | Heapy.....                     | 123    | 1,243   | 225    | 60    | 98     | 844    | 188   | 2   | 23     | 41  | 1,098   | 3,756   | 29.2 | 68 |
| 69 | Helmshore.....                 | 46     | 50      | 130    | 45    | 3      | 337    | ..    | ..  | 1      | 5   | 343     | 1,114   | 30.8 | 69 |
| 70 | Helmshore.....                 | 222    | 4,669   | ..     | 130   | 884    | 874    | 20    | ..  | 75     | 68  | 1,087   | 5,892   | 19.2 | 70 |
| 71 | Heywood.....                   | 3,022  | 48,229  | 390    | 1,300 | 9,427  | 26,873 | 2,129 | 15  | 1,310  | 442 | 32,769  | 88,126  | 37.2 | 71 |
| 72 | Higham.....                    | 75     | 1,078   | ..     | 40    | 755    | 593    | 32    | 2   | 3      | 50  | 679     | 1,541   | 44.0 | 72 |

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                           | No. of Members at end of Year. | Total Capital at end of Year. |        | Capital Invested with C. W. S. at end of Year. |       | Purchases from C. W. S. during the Year. |          |                |              |                       | Total Sales during Year. | Percentage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|---------------------------------|--------------------------------|-------------------------------|--------|------------------------------------------------|-------|------------------------------------------|----------|----------------|--------------|-----------------------|--------------------------|-----------------------------------------------------------|---------|
|         |                                 |                                | Share.                        | Loan.  | Share.                                         | Loan. | Grocery & Provisions.                    | Drapery. | Woollen Cloth. | Boots Shoes. | Furniture & Hardware. |                          |                                                           |         |
| 73      | LANCASHIRE—Con.                 | 609                            | £ 8,412                       | £ 361  | £ 275                                          | £ 77  | £ 6,795                                  | £ 1,336  | £ 167          | £ 390        | £ 258                 | £ 8,946                  | 48.1                                                      | 73      |
| 74      | Higher Hurst .....              | 237                            | 1,673                         | ..     | 61                                             | ..    | 971                                      | 97       | ..             | ..           | 21                    | 8,771                    | 12.5                                                      | 74      |
| 75      | " Walton .....                  | 331                            | 2,573                         | ..     | 185                                            | 24    | 311                                      | 25       | ..             | 8            | ..                    | 2,521                    | 13.6                                                      | 75      |
| 76      | Hindley .....                   | 167                            | 87                            | 40     | 1                                              | ..    | 667                                      | ..       | ..             | ..           | ..                    | 1,450                    | 46.0                                                      | 76      |
| 77      | Huddlesford .....               | 262                            | 1,727                         | 1,856  | 130                                            | 101   | 1,207                                    | 143      | ..             | ..           | 16                    | 13,354                   | 10.2                                                      | 77      |
| 78      | Horwich .....                   | 286                            | 4,069                         | ..     | 120                                            | 115   | 1,230                                    | 136      | 16             | 47           | 66                    | 4,965                    | 30.1                                                      | 78      |
| 79      | Hurst Brook .....               | 126                            | 1,251                         | 323    | 65                                             | 6     | 1,202                                    | 132      | 3              | 11           | 48                    | 1,396                    | 44.1                                                      | 79      |
| 80      | Kirkby-in-Furness .....         | 344                            | 6,388                         | 2,936  | 200                                            | 2,969 | 1,587                                    | 361      | 80             | 264          | 56                    | 7,934                    | 29.6                                                      | 80      |
| 81      | Kirkham .....                   | 439                            | 4,144                         | 977    | 225                                            | 569   | 5,116                                    | 916      | 78             | 292          | 172                   | 14,264                   | 45.8                                                      | 81      |
| 82      | Knuzden Brook .....             | 88                             | 497                           | 550    | 60                                             | 3     | 8                                        | ..       | 6              | ..           | ..                    | 2,922                    | 4                                                         | 82      |
| 83      | Lancaster .....                 | 3,085                          | 43,554                        | ..     | 1,412                                          | 1,151 | 9,918                                    | 1,788    | 225            | 878          | 87                    | 52,725                   | 24.4                                                      | 83      |
| 84      | Lancbottom .....                | 118                            | 1,634                         | ..     | 30                                             | 15    | 453                                      | ..       | ..             | ..           | ..                    | 2,913                    | 15.5                                                      | 84      |
| 85      | Lees .....                      | 531                            | 9,309                         | ..     | 110                                            | 2     | 2,740                                    | ..       | ..             | ..           | 12                    | 12,736                   | 21.6                                                      | 85      |
| 86      | Leigh .....                     | 3,498                          | 49,282                        | 869    | 141                                            | ..    | 8,472                                    | 662      | 8              | 11           | 79                    | 9,232                    | 8.5                                                       | 86      |
| 87      | Leyland and Farington .....     | 381                            | 8,250                         | 270    | 1,167                                          | 150   | 2,515                                    | 150      | ..             | 129          | 10                    | 7,218                    | 38.8                                                      | 87      |
| 88      | Littleboro'—Industrial .....    | 1,569                          | 36,995                        | 15,948 | 775                                            | 172   | 7,491                                    | 378      | ..             | 116          | 57                    | 8,042                    | 17.8                                                      | 88      |
| 89      | " Supply .....                  | 173                            | 324                           | 128    | 67                                             | 19    | 5,507                                    | 2        | ..             | 2            | 19                    | 530                      | 17.1                                                      | 89      |
| 90      | Little Hulton .....             | 418                            | 4,254                         | ..     | 200                                            | 769   | 5,631                                    | 691      | 65             | 135          | 225                   | 3,100                    | 50.1                                                      | 90      |
| 91      | " Lever .....                   | 213                            | 2,787                         | 10     | 60                                             | 32    | 1,387                                    | 118      | ..             | 3            | 18                    | 13,415                   | 38.7                                                      | 91      |
| 92      | Liverpool Equitable .....       | 50                             | 47                            | ..     | ..                                             | ..    | 134                                      | ..       | ..             | ..           | 1                     | 79                       | ..                                                        | 92      |
| 93      | Livesey .....                   | 154                            | 1,836                         | ..     | 80                                             | 363   | 256                                      | ..       | ..             | ..           | ..                    | 5,118                    | 5.2                                                       | 93      |
| 94      | Longridge .....                 | 647                            | 6,537                         | 1,393  | 275                                            | 151   | 3,259                                    | 359      | ..             | 383          | 277                   | 14,787                   | 28.7                                                      | 94      |
| 95      | Lovelongh .....                 | 356                            | 6,995                         | ..     | 175                                            | 6     | 4,909                                    | 908      | 8              | 231          | 240                   | 13,372                   | 47.1                                                      | 95      |
| 96      | Lower Darwin—Conservative ..... | 133                            | 2,266                         | 1,025  | ..                                             | ..    | 22                                       | ..       | ..             | ..           | 22                    | 3,029                    | 7                                                         | 96      |
| 97      | " Earcroft .....                | 135                            | 1,230                         | 350    | 70                                             | 916   | 272                                      | ..       | 8              | ..           | 5                     | 7,217                    | 3.9                                                       | 97      |
| 98      | High Street .....               | 192                            | 1,814                         | 226    | 105                                            | 3     | 1,027                                    | 30       | 16             | ..           | 19                    | 5,155                    | 21.1                                                      | 98      |
| 99      | Lower House .....               | 370                            | 6,959                         | 210    | 200                                            | 8     | 3,847                                    | 138      | 10             | 1            | 103                   | 4,099                    | 41.8                                                      | 99      |
| 100     | Low Moor, Nelson Street .....   | 155                            | 1,331                         | ..     | 80                                             | 190   | 1,078                                    | 16       | 23             | 36           | 39                    | 5,648                    | 21.1                                                      | 100     |



|     |                          |        |         |        |       |        |        |       |     |       |       |         |         |      |
|-----|--------------------------|--------|---------|--------|-------|--------|--------|-------|-----|-------|-------|---------|---------|------|
| 101 | Manchester—Equitable     | 11,948 | 149,944 | 931    | 6,045 | 24,147 | 94,543 | 2,701 | 448 | 595   | 2,145 | 100,432 | 229,886 | 43-6 |
| 102 | "Furnishing              | 47     | 238     | 53     | 50    | 273    | 1,136  | 1,225 | 819 | 697   | 1,743 | 5,620   | 5,311   | ..   |
| 103 | "Hulme Pioneers          | 249    | 1,390   | 130    | 50    | 153    | 2,298  | 348   | 13  | 161   | 100   | 5,902   | 5,802   | 50-3 |
| 104 | Middleton—Industrial     | 1,502  | 27,381  | 3,657  | 750   | 2,240  | 10,908 | 1,047 | 95  | 240   | 263   | 12,558  | 88,545  | 32-5 |
| 105 | Millgate                 | 338    | 3,302   | 558    | 200   | 149    | 971    | 4     | ..  | 30    | 83    | 1,088   | 10,441  | 10-4 |
| 106 | Milnrow—Conservative     | 251    | 3,055   | ..     | ..    | ..     | 585    | 22    | ..  | 25    | 100   | 741     | 5,787   | 12-8 |
| 107 | "Equitable               | 1,048  | 24,703  | 1,009  | 515   | 122    | 5,042  | 374   | ..  | 247   | 100   | 5,763   | 84,913  | 16-5 |
| 108 | Mossley                  | 2,386  | 38,770  | 2,869  | 1,155 | 451    | 18,824 | 636   | 24  | 801   | 564   | 20,909  | 77,937  | 26-8 |
| 109 | Nangreaves               | 58     | 168     | ..     | ..    | ..     | 492    | 1,995 | ..  | 595   | 350   | 16,447  | 1,246   | 40-3 |
| 110 | Nelson                   | 1,932  | 21,267  | 3,708  | 895   | 3,500  | 14,180 | 2     | 27  | ..    | 886   | 10,447  | 44,630  | 38-8 |
| 111 | "                        | ..     | ..      | ..     | ..    | 23     | 742    | 73    | 1   | 2     | 08    | 3,615   | 3,615   | 24-5 |
| 112 | Newhey                   | 8,191  | 75,876  | 4,985  | 3,152 | 306    | 46,646 | 3,372 | 838 | 910   | 904   | 52,770  | 228,946 | 23-0 |
| 113 | Oldham—Industrial        | 9,684  | 94,798  | 19,419 | 4,445 | ..     | 48,266 | 3,809 | 445 | 255   | 780   | 53,555  | 812,230 | 17-1 |
| 114 | "                        | 114    | 95      | ..     | 60    | 41     | 1,273  | ..    | ..  | ..    | 6     | 1,279   | 2,762   | 46-3 |
| 115 | Old Swan Workmen's       | 650    | 14,646  | 285    | 315   | 198    | 2,599  | 458   | 60  | 279   | 11    | 3,407   | 25,218  | 13-5 |
| 116 | Oswaldtwistle            | 3,169  | 92,160  | 2,452  | 1,725 | 2,061  | 23,425 | 1,642 | 753 | 1,108 | 538   | 27,466  | 95,413  | 28-8 |
| 117 | Over Darwen—Industrial   | 908    | 7,455   | ..     | ..    | ..     | 1,944  | 8     | ..  | ..    | 5     | 1,937   | 25,831  | 7-5  |
| 118 | "Provident               | 867    | 14,238  | ..     | 305   | 810    | 9,916  | 649   | 3   | 455   | 428   | 11,451  | 22,763  | 50-3 |
| 119 | Padiham                  | 206    | 1,268   | ..     | 100   | 104    | 2,108  | 4,933 | ..  | 2     | 1,166 | 54,019  | 7,460   | 29-2 |
| 120 | Park Lane                | 6,057  | 40,075  | 2,100  | 3,050 | 4,987  | 43,643 | 7     | 2   | 4,275 | 1,166 | 184,255 | 134,255 | 40-2 |
| 121 | Pennybridge              | 76     | 522     | ..     | 40    | 7      | 409    | 15    | ..  | 5     | 40    | 469     | 1,534   | 30-5 |
| 122 | Preston                  | 3,409  | 27,454  | 4,976  | 2,085 | 26     | 16,449 | 263   | 2   | 478   | 155   | 17,347  | 80,929  | 21-4 |
| 123 | Prestwich                | 2,085  | 47,405  | 7,458  | 485   | 5,619  | 20,424 | 1,837 | 364 | 559   | 648   | 23,892  | 49,308  | 48-4 |
| 124 | Radcliffe and Pilkington | 3,474  | 43,172  | 24     | 1,505 | 3,802  | 16,941 | 811   | 276 | 1,266 | 1,027 | 20,321  | 101,161 | 20-0 |
| 125 | Ramsbottom—Conservative  | 211    | 775     | ..     | ..    | 151    | 151    | ..    | ..  | ..    | ..    | 151     | 151     | 8-4  |
| 126 | "Industrial              | 2,510  | 77,113  | 93,242 | 1,270 | 1,080  | 7,767  | 97    | ..  | 366   | 14    | 8,244   | 69,270  | 11-9 |
| 127 | Rawtenstall—Bank Street  | 1,091  | 12,296  | 6,823  | 690   | 131    | 4,108  | 270   | 103 | 112   | 88    | 4,681   | 15,715  | 29-8 |
| 128 | Rhodes                   | 680    | 16,576  | ..     | 395   | 1,249  | 5,321  | 1,126 | 152 | 374   | 281   | 7,254   | 16,566  | 43-8 |
| 129 | Ribchester               | 113    | 1,286   | ..     | 55    | 308    | 373    | ..    | ..  | ..    | 8     | 381     | 2,897   | 13-1 |
| 130 | Ringley and Kersley      | 366    | 3,428   | ..     | 190   | 735    | 2,373  | 4     | 10  | 163   | 53    | 2,608   | 8,842   | 29-4 |
| 131 | Rishton                  | 670    | 12,234  | 2,305  | 150   | 86     | 1,124  | 112   | ..  | 229   | 79    | 1,544   | 18,569  | 8-2  |
| 132 | Rochdale—Conservative    | 1,075  | 7,064   | ..     | 280   | ..     | 1,565  | 23    | ..  | ..    | 8     | 1,591   | 15,849  | 10-0 |
| 133 | "Pioneers                | 10,984 | 321,678 | 12,101 | 5,600 | 27,213 | 64,252 | 1,281 | 535 | 892   | 1,004 | 67,364  | 246,031 | 27-6 |
| 134 | Royton                   | 1,048  | 11,755  | 944    | 504   | 131    | 8,198  | 908   | 3   | 352   | 235   | 9,696   | 24,363  | 39-8 |
| 135 | Sabden—Industrial        | 338    | 3,887   | ..     | 132   | 1,088  | 196    | ..    | ..  | ..    | ..    | 196     | 9,042   | 2-1  |
| 136 | St. Helens               | 1,668  | 1,759   | ..     | 284   | ..     | 15,622 | 2     | ..  | 3     | 78    | 15,705  | 31,065  | 50-5 |
| 137 | Sawrey                   | 258    | 1,490   | 171    | 115   | 59     | 576    | 50    | ..  | 14    | 10    | 650     | 4,670   | 13-9 |
| 138 | Shawforth                | 209    | 5,168   | ..     | 120   | 34     | 831    | ..    | ..  | 32    | 73    | 936     | 7,929   | 11-8 |
| 139 | Smithy Bridge            | 204    | 4,144   | ..     | 120   | 2,024  | 1,798  | 106   | 1   | 14    | 85    | 1,954   | 5,736   | 34-0 |
| 140 | Stacksteads              | 1,160  | 18,609  | 2,126  | 585   | 18     | 2,690  | 406   | 42  | 73    | 122   | 3,333   | 21,510  | 15-5 |
| 141 | Stalybridge              | 2,749  | 28,130  | ..     | 1,208 | 619    | 14,098 | 1,205 | 157 | 1,608 | 396   | 17,464  | 67,298  | 25-9 |
| 142 | Steps                    | 259    | 5,774   | ..     | 140   | ..     | 1,255  | ..    | ..  | ..    | 6     | 1,261   | 7,002   | 18-0 |
| 143 | Summerseat               | 157    | 2,449   | 2,019  | 85    | 1,096  | 1,911  | 122   | ..  | 50    | 43    | 2,126   | 5,882   | 36-1 |
| 144 | Swinton—Chorley Road     | 250    | 2,855   | 1,149  | 110   | 211    | 1,287  | 52    | 92  | 175   | 124   | 2,130   | 9,992   | 17-3 |
| 145 | "Moorside                | 287    | 3,027   | 2,781  | 140   | 20     | 3,165  | 91    | ..  | 110   | 106   | 3,472   | 8,289   | 41-9 |
| 146 | Tottenham                | 997    | 22,962  | ..     | 480   | 637    | 4,401  | 337   | 28  | 126   | 141   | 5,083   | 28,512  | 17-7 |
| 147 | Trawden                  | 131    | 520     | ..     | 65    | 29     | 670    | ..    | ..  | ..    | ..    | 670     | 4,118   | 16-2 |
| 148 | Tunstead                 | 557    | 7,607   | 573    | 300   | 350    | 1,117  | 15    | ..  | 6     | 1     | 1,139   | 8,413   | 13-5 |
| 149 | Turn...                  | 87     | 556     | ..     | 45    | 31     | 587    | ..    | ..  | ..    | 14    | 601     | 2,240   | 26-8 |
| 150 | Tyldesley                | 221    | 211     | ..     | 88    | ..     | 3,834  | ..    | ..  | ..    | 10    | 3,844   | 7,234   | 53-1 |

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                        | No. of Members at end of Year. | Total Capital at end of Year. |        | Capital Invested with C. W. S. at end of Year. |         | Purchases from C. W. S. during the Year. |          |                |                  |                         |           | Total Sales during Year. | Per-centage of Pur-chases from C. W. S. on the Total Sales. | Number. |
|---------|------------------------------|--------------------------------|-------------------------------|--------|------------------------------------------------|---------|------------------------------------------|----------|----------------|------------------|-------------------------|-----------|--------------------------|-------------------------------------------------------------|---------|
|         |                              |                                | Share.                        | Loan.  | Share.                                         | Loan.   | Grocery & Pro-visions.                   | Drapery. | Woollen Cloth. | Boots and Shoes. | Furni-ture & Hard-ware. | Total.    |                          |                                                             |         |
| 151     | LANCASHIRE—Con.              |                                |                               |        |                                                |         |                                          |          |                |                  |                         |           |                          |                                                             |         |
| 151     | Ulverston .....              | 1,405                          | £ 17,140                      | ..     | £ 665                                          | 527     | £ 4,677                                  | 362      | 77             | 436              | £ 179                   | 5,731     | £ 31,725                 | 18-0                                                        | 151     |
| 152     | *Upper Swinton .....         | 300                            | .. 539                        | ..     | 58                                             | ..      | 2,738                                    | 51       | ..             | 113              | 116                     | 8,018     | 9,718                    | 31-0                                                        | 152     |
| 153     | Walkden .....                | 1,300                          | 8,743                         | ..     | 650                                            | 2,825   | 17,231                                   | 1,186    | ..             | 890              | 417                     | 19,732    | 40,515                   | 48-6                                                        | 153     |
| 154     | Walmer Bridge .....          | 61                             | 302                           | ..     | 30                                             | 5       | 339                                      | 34       | ..             | 50               | ..                      | 493       | 1,037                    | 40-8                                                        | 154     |
| 155     | Walsden .....                | 464                            | 13,089                        | ..     | 215                                            | 2,613   | 2,423                                    | 148      | ..             | 188              | 180                     | 2,989     | 14,489                   | 20-3                                                        | 155     |
| 156     | " Bridge End .....           | 659                            | 15,942                        | ..     | 370                                            | 2,265   | 2,849                                    | 224      | 4              | 200              | 61                      | 3,338     | 22,224                   | 15-0                                                        | 156     |
| 157     | Walton-le-Dale .....         | 300                            | .. 285                        | ..     | 153                                            | 66      | 1,620                                    | 229      | ..             | 42               | 41                      | 1,932     | 14,334                   | 13-4                                                        | 157     |
| 158     | Wardle .....                 | 321                            | 6,409                         | 494    | ..                                             | ..      | 3                                        | ..       | ..             | ..               | ..                      | 8         | 10,344                   | ..                                                          | 158     |
| 159     | Warrington .....             | 1,607                          | 19,911                        | ..     | 870                                            | 1,732   | 8,068                                    | 1,112    | 7              | 483              | 161                     | 9,831     | 40,450                   | 24-3                                                        | 159     |
| 160     | Water .....                  | 128                            | 1,361                         | ..     | 86                                             | ..      | 121                                      | ..       | ..             | ..               | 2                       | 123       | 4,136                    | 2-9                                                         | 160     |
| 161     | Waterfoot .....              | 792                            | 12,802                        | 3,653  | 270                                            | 66      | 4,867                                    | 159      | 1              | 245              | 94                      | 5,366     | 18,425                   | 29-1                                                        | 161     |
| 162     | Waterloo .....               | 660                            | 623                           | 10,146 | 305                                            | 1,107   | 3,576                                    | 563      | ..             | 346              | 152                     | 4,643     | 19,277                   | 24-0                                                        | 162     |
| 163     | *Westhoughton—Friendly ..... | 522                            | 6,621                         | ..     | ..                                             | ..      | 1,236                                    | 47       | ..             | ..               | 7                       | 1,290     | 16,492                   | 7-8                                                         | 163     |
| 164     | " United .....               | 626                            | 6,279                         | ..     | ..                                             | ..      | 610                                      | 18       | ..             | ..               | ..                      | 628       | 22,357                   | 2-8                                                         | 164     |
| 165     | Wheatley Lane .....          | 76                             | 1,119                         | 85     | 45                                             | 87      | 616                                      | 52       | 6              | 2                | 32                      | 708       | 2,059                    | 34-3                                                        | 165     |
| 166     | Wheelton .....               | 80                             | 1,076                         | 6      | 45                                             | 7       | 56                                       | ..       | ..             | ..               | ..                      | 56        | 2,435                    | 2-3                                                         | 166     |
| 167     | *Whiston .....               | 105                            | 494                           | ..     | 50                                             | 30      | 1,990                                    | ..       | ..             | ..               | 29                      | 2,019     | 4,971                    | 40-6                                                        | 167     |
| 168     | White Coppice .....          | 30                             | 144                           | ..     | 15                                             | 2       | 159                                      | ..       | ..             | ..               | ..                      | 159       | 1,122                    | 14-1                                                        | 168     |
| 169     | Whitfield and Unsworth ..... | 532                            | 6,637                         | 2,915  | 260                                            | 262     | 4,966                                    | 378      | ..             | 85               | 279                     | 5,708     | 12,002                   | 47-5                                                        | 169     |
| 170     | Whitewell Bottom .....       | 192                            | 2,975                         | 947    | 105                                            | 123     | 578                                      | 143      | ..             | ..               | 23                      | 748       | 6,021                    | 12-4                                                        | 170     |
| 171     | Whitworth .....              | 903                            | 18,139                        | ..     | 510                                            | 811     | 4,196                                    | 197      | ..             | 70               | 59                      | 4,522     | 28,749                   | 15-7                                                        | 171     |
| 172     | Winewall .....               | 107                            | 1,954                         | ..     | 55                                             | 121     | 702                                      | ..       | ..             | ..               | 27                      | 729       | 2,704                    | 26-9                                                        | 172     |
| 173     | *Withnell .....              | 340                            | 4,000                         | 280    | 170                                            | 81      | 1,878                                    | 156      | ..             | 3                | 33                      | 2,070     | 12,200                   | 16-9                                                        | 173     |
| 174     | Woolfold .....               | 617                            | 9,789                         | ..     | 305                                            | 3,913   | 3,944                                    | 699      | 167            | 169              | 163                     | 5,142     | 11,911                   | 43-1                                                        | 174     |
| 175     | Worsley—Roe Green .....      | 157                            | 8,333                         | ..     | 75                                             | 532     | 2,445                                    | 352      | 61             | 209              | 112                     | 3,173     | 5,587                    | 57-4                                                        | 175     |
| 176     | Wray .....                   | 24                             | 135                           | 48     | 20                                             | 13      | 126                                      | 27       | ..             | 8                | 14                      | 170       | 620                      | 27-4                                                        | 176     |
| 200,762 |                              | 280,932                        | 263,087                       |        | 82,892                                         | 220,923 | 121,3815                                 | 79,137   | 7,970          | 50,129           | 28,524                  | 1,379,565 | 5,141,307                | 26-8                                                        |         |



YORKSHIRE.

| YORKSHIRE. |           |         |       |       |        |        |       |       |       |
|------------|-----------|---------|-------|-------|--------|--------|-------|-------|-------|
| 177        | 101       | 912     | 1,443 | 18    | ..     | 528    | ..    | ..    | 4     |
| 178        | 174       | 1,613   | 1,443 | 32    | ..     | 788    | ..    | ..    | 11    |
| 179        | 235       | 1,944   | 467   | ..    | ..     | 15     | ..    | ..    | 15    |
| 180        | 339       | 2,522   | ..    | 198   | 214    | 2,926  | ..    | ..    | 20    |
| 181        | 324       | 2,170   | 989   | 185   | 60     | 583    | 202   | 101   | 60    |
| 182        | 98        | 1,497   | ..    | 60    | 583    | 513    | ..    | ..    | 76    |
| 183        | 452       | 8,915   | 498   | 201   | 255    | 2,318  | ..    | ..    | 19    |
| 184        | 10,680    | 118,800 | 7,025 | 5,000 | 7,025  | 72,845 | 5,901 | 939   | 1,962 |
| 185        | 3,211     | 60,094  | 4,075 | 1,553 | 4,075  | 28,279 | 2,830 | 351   | 252   |
| 186        | 281       | 2,753   | ..    | 84    | ..     | 1,009  | 66    | 22    | 18    |
| 187        | 124       | 1,142   | ..    | 8     | ..     | 376    | ..    | ..    | ..    |
| 188        | 554       | 6,614   | 50    | 300   | 80     | 3,405  | 938   | 401   | 207   |
| 189        | 2,270     | 88,338  | 603   | 2,085 | 1,788  | 12,913 | 1,654 | 570   | 569   |
| 190        | 1,900     | 8,806   | ..    | 520   | 2,126  | 8,404  | 1,075 | 903   | 62    |
| 191        | 1,252     | 19,609  | ..    | 565   | 2,139  | 8,039  | 981   | 126   | 16    |
| 192        | 117       | 1,057   | 1,103 | 60    | 657    | 411    | 10    | 1     | ..    |
| 193        | 821       | 5,612   | 567   | 350   | 567    | 3,935  | 1,043 | 486   | 246   |
| 194        | 7,290     | 82,536  | 980   | 8,442 | 4,339  | 83,956 | 1,859 | 2,284 | 82    |
| 195        | 78        | 457     | 107   | ..    | ..     | 152    | 1     | ..    | 2     |
| 196        | 4,784     | 64,542  | 1,083 | ..    | ..     | 25,955 | 860   | 639   | 112   |
| 197        | 110       | 560     | 330   | ..    | ..     | 607    | ..    | ..    | ..    |
| 198        | 276       | 4,693   | ..    | 140   | 963    | 1,366  | 384   | 120   | 82    |
| 199        | 620       | 3,642   | 2,238 | 280   | 900    | 4,188  | 380   | 401   | 65    |
| 200        | 236       | 2,562   | 94    | 140   | 97     | 1,649  | 393   | 66    | 179   |
| 201        | 116       | 226     | ..    | ..    | ..     | 939    | 23    | ..    | 4     |
| 202        | 170       | 1,876   | ..    | 155   | 3      | 560    | 35    | ..    | 1     |
| 203        | 371       | 4,044   | ..    | 185   | 345    | 2,566  | 305   | 10    | 6     |
| 204        | 290       | 2,525   | 634   | ..    | ..     | 1,788  | 170   | 77    | 63    |
| 205        | 2,501     | 47,910  | ..    | 1,265 | 9,906  | 20,352 | 1,114 | 1,376 | 252   |
| 206        | 566       | 12,631  | ..    | 270   | 117    | 4,649  | 8     | 82    | 25    |
| 207        | 258       | 1,624   | 90    | 125   | 111    | 548    | 60    | 6     | 20    |
| 208        | 314       | 5,888   | ..    | 175   | 1,071  | 3,025  | 705   | 157   | 149   |
| 209        | 444       | 7,654   | ..    | 201   | ..     | 2,259  | 68    | 58    | 72    |
| 210        | 580       | 8,042   | ..    | 400   | 97     | 2,982  | 142   | 49    | 67    |
| 211        | 147       | 227     | 150   | ..    | ..     | 754    | ..    | 2     | 116   |
| 212        | 988       | 3,442   | ..    | 300   | 163    | 2,029  | 483   | 82    | 99    |
| 213        | 5,526     | 108,986 | ..    | 3,000 | 10,693 | 35,295 | 1,874 | 806   | 527   |
| 214        | 298       | 3,762   | 2,351 | 160   | 216    | 2,374  | 243   | 220   | 60    |
| 215        | 143       | 1,132   | ..    | 80    | 73     | 886    | 76    | 5     | 3     |
| 216        | 2,928     | 21,577  | 980   | 925   | ..     | 9,823  | 1,329 | 1,006 | 287   |
| 217        | 69        | 157     | ..    | 57    | ..     | 782    | ..    | 2     | ..    |
| 218        | 698       | 5,923   | ..    | 320   | 295    | 4,881  | 304   | 67    | 51    |
| 219        | 86        | 1,205   | 20    | 50    | 24     | 471    | ..    | ..    | 4     |
| 220        | 949       | 11,192  | 1,280 | 505   | 6      | 3,726  | 134   | ..    | ..    |
| 221        | 851       | 2,010   | 50    | 173   | 12     | 3,083  | ..    | ..    | ..    |
| 222        | 100       | 992     | 188   | 5     | 5      | 963    | 113   | 73    | 88    |
| 223        | Emley     | 1,636   | 338   | 105   | 32     | 1,594  | 388   | 162   | 20    |
| 224        | *Egbert   | 131     | 215   | 70    | 105    | 623    | 78    | 40    | 33    |
| 225        | *Flockton | 110     | 887   | 47    | ..     | 885    | 209   | 95    | 20    |

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                           | No. of Members at end of Year. | Total Capital at end of Year. |       | Capital Invested with C. W. S. at end of Year. |        | Purchases from C. W. S. during the Year. |          |                |                  |                           | Total Sales during Year. | Per-centage of Pur-chases from C. W. S. on the Total Sales. | Number. |
|---------|---------------------------------|--------------------------------|-------------------------------|-------|------------------------------------------------|--------|------------------------------------------|----------|----------------|------------------|---------------------------|--------------------------|-------------------------------------------------------------|---------|
|         |                                 |                                | Share.                        | Loan. | Share.                                         | Loan.  | Grocery & Pro-visions.                   | Drapery. | Woollen Cloth. | Boots and Shoes. | Furni-ture and Hard-ware. |                          |                                                             |         |
| 226     | YORKSHIRE—Con.                  |                                |                               |       |                                                |        |                                          |          |                |                  |                           |                          |                                                             |         |
| 226     | *Gargrave .....                 | 180                            | £ 1,283                       | ..    | £ 80                                           | £ 7    | £ 923                                    | £ 27     | ..             | £ 16             | £ 5                       | £ 4,668                  | 20.8                                                        | 226     |
| 227     | Golar .....                     | 514                            | 4,656                         | ..    | 255                                            | 489    | 4,109                                    | 713      | 2              | 115              | 195                       | 13,594                   | 37.7                                                        | 227     |
| 228     | Gomersal .....                  | 688                            | 10,059                        | ..    | 145                                            | 620    | 3,722                                    | 540      | 8              | 463              | 181                       | 17,133                   | 28.3                                                        | 228     |
| 229     | Goole and District .....        | 468                            | 2,582                         | 684   | 176                                            | ..     | 3,481                                    | 67       | ..             | 545              | 18                        | 7,722                    | 53.2                                                        | 229     |
| 230     | Grangemoor .....                | 100                            | 806                           | 830   | 24                                             | ..     | 583                                      | 7        | ..             | 10               | 39                        | 4,000                    | 15.9                                                        | 230     |
| 231     | Grasscroft .....                | 284                            | 7,048                         | ..    | 135                                            | 494    | 1,888                                    | 275      | 35             | 106              | 78                        | 8,743                    | 27.2                                                        | 231     |
| 232     | Great Horton .....              | 1,687                          | 20,376                        | ..    | 740                                            | 1,364  | 9,942                                    | 881      | ..             | 550              | 172                       | 49,242                   | 23.4                                                        | 232     |
| 233     | Greenfield .....                | 553                            | 11,590                        | 542   | 300                                            | 119    | 3,786                                    | 159      | ..             | 147              | 98                        | 19,193                   | 21.8                                                        | 233     |
| 234     | Greengates and Apperley Bridge. | 190                            | 952                           | 694   | 100                                            | 40     | 1,084                                    | 236      | ..             | 134              | 51                        | 4,381                    | 38.2                                                        | 234     |
| 235     | Grosmont .....                  | 259                            | 1,093                         | ..    | ..                                             | ..     | 1,612                                    | 99       | ..             | 1                | 35                        | 1,687                    | 16.1                                                        | 235     |
| 236     | Guiseley .....                  | 402                            | 4,692                         | 744   | 200                                            | 228    | 2,562                                    | 318      | 13             | 274              | 113                       | 3,280                    | 39.6                                                        | 236     |
| 237     | Halifax .....                   | 8,057                          | 136,984                       | ..    | 3,780                                          | 51     | 41,026                                   | 4,825    | 235            | 1,079            | 265                       | 8,286                    | 21.0                                                        | 237     |
| 238     | Haworth .....                   | 777                            | 8,987                         | ..    | 370                                            | 461    | 4,139                                    | ..       | ..             | ..               | ..                        | 21,326                   | 19.4                                                        | 238     |
| 239     | Hebden Bridge .....             | 1,670                          | 37,601                        | 407   | 790                                            | 4,678  | 12,642                                   | 249      | 9              | 340              | 202                       | 13,442                   | 29.3                                                        | 239     |
| 240     | Heckmondwike .....              | 5,767                          | 93,871                        | 5,046 | 2,755                                          | 10,136 | 44,442                                   | 1,784    | 243            | 1,780            | 198                       | 135,592                  | 35.7                                                        | 240     |
| 241     | Hellfield .....                 | 67                             | 388                           | 10    | 12                                             | ..     | 988                                      | ..       | ..             | 22               | 4                         | 642                      | 64.5                                                        | 241     |
| 242     | Heptonstall .....               | 471                            | 7,994                         | ..    | 225                                            | 2,386  | 5,022                                    | 483      | ..             | 141              | 98                        | 12,885                   | 44.6                                                        | 242     |
| 243     | Hepworth .....                  | 195                            | 1,746                         | ..    | ..                                             | ..     | 487                                      | ..       | ..             | ..               | ..                        | 7,433                    | 6.5                                                         | 243     |
| 244     | High Burton .....               | 115                            | 1,440                         | ..    | ..                                             | ..     | 237                                      | 12       | ..             | ..               | 14                        | 2,898                    | 9.0                                                         | 244     |
| 245     | Hillhouse .....                 | 1,354                          | 9,484                         | ..    | ..                                             | ..     | 3,886                                    | 44       | ..             | 148              | ..                        | 94,607                   | 11.7                                                        | 245     |
| 246     | Hinchliffe Mill .....           | 505                            | 2,685                         | 848   | 250                                            | 37     | 1,625                                    | 5        | ..             | ..               | 8                         | 1,683                    | 10.3                                                        | 246     |
| 247     | Holmfild .....                  | 104                            | 1,512                         | 1,067 | 80                                             | 31     | 1,026                                    | 54       | ..             | 4                | 45                        | 3,563                    | 31.7                                                        | 247     |
| 248     | Honley .....                    | 580                            | 8,586                         | ..    | ..                                             | ..     | 3,600                                    | 53       | 3              | 5                | 8                         | 16,048                   | 22.8                                                        | 248     |
| 249     | Horbury .....                   | 680                            | 6,990                         | ..    | 230                                            | ..     | 2,187                                    | 296      | ..             | ..               | 5                         | 14,518                   | 17.1                                                        | 249     |
| 250     | Huddersfield .....              | 8,162                          | 117,091                       | 1,815 | 6,000                                          | 22,300 | 69,108                                   | 2,728    | 111            | 4,065            | 949                       | 209,426                  | 36.7                                                        | 250     |
| 251     | Ilkley .....                    | 130                            | 298                           | 50    | 37                                             | ..     | 921                                      | 111      | ..             | 121              | 21                        | 2,558                    | 45.8                                                        | 251     |
| 252     | Ilkington .....                 | 124                            | 1,190                         | ..    | 75                                             | 68     | 609                                      | ..       | ..             | ..               | 3                         | 2,536                    | 24.1                                                        | 252     |
| 253     | Ingletton .....                 | 156                            | 1,943                         | ..    | 85                                             | 2      | 1,003                                    | 1        | ..             | 141              | 90                        | 4,873                    | 25.3                                                        | 253     |



|     |                          |        |         |        |       |       |        |       |       |       |     |        |         |      |     |
|-----|--------------------------|--------|---------|--------|-------|-------|--------|-------|-------|-------|-----|--------|---------|------|-----|
| 354 | Junction                 | 269    | 3,352   | 100    | 140   | 801   | 1,174  | 1     | ..    | 5     | 26  | 1,206  | 12,803  | 9.4  | 254 |
| 255 | " House                  | 420    | 2,673   | ..     | 1,750 | 9,814 | 967    | 3,082 | 1,004 | 2,085 | 852 | 267    | 11,457  | 2.3  | 255 |
| 256 | Keighley                 | 3,784  | 45,116  | ..     | 1,423 | 181   | 30,588 | 25    | ..    | 69    | 34  | 97,511 | 106,626 | 35.0 | 256 |
| 257 | Kilnhurst                | 332    | 4,105   | 1,416  | 8     | ..    | 2,297  | ..    | ..    | ..    | ..  | 2,418  | 11,330  | 21.2 | 257 |
| 258 | Kippax                   | 210    | 310     | 520    | 140   | 46    | 665    | 97    | 1     | 23    | ..  | 237    | 5,039   | 4.5  | 258 |
| 259 | Kirkburton               | 246    | 2,971   | 110    | 105   | 10    | 828    | ..    | ..    | ..    | ..  | 786    | 5,877   | 13.3 | 259 |
| 260 | Kraheaton Field Head     | 201    | 2,458   | ..     | 34    | ..    | 880    | ..    | ..    | ..    | 9   | 828    | 5,973   | 13.8 | 260 |
| 261 | Knottingham and District | 151    | 286     | ..     | 125   | 2     | 893    | 44    | ..    | 16    | 1   | 921    | 2,055   | 44.8 | 261 |
| 262 | Lane Dye House           | 205    | 2,976   | 190    | ..    | ..    | 833    | ..    | ..    | ..    | 13  | 899    | 5,893   | 15.2 | 262 |
| 263 | Lane Ends                | 151    | 631     | 80     | ..    | ..    | 193    | 1     | 15    | 21    | 544 | 207    | 3,185   | 6.5  | 263 |
| 264 | Leeds Industrial         | 23,985 | 251,295 | 13,829 | ..    | ..    | 9,950  | 5,894 | ..    | ..    | ..  | 16,424 | 430,204 | 3.4  | 264 |
| 265 | " Mutual                 | 1,200  | 4,445   | 4,500  | 200   | 937   | 119    | 208   | ..    | 86    | 17  | 11,119 | 21,896  | 0.5  | 265 |
| 266 | Lees and Cross Roads     | 390    | 4,083   | ..     | ..    | ..    | 2,877  | 6     | ..    | ..    | ..  | 3,187  | 11,967  | 26.6 | 266 |
| 267 | Lepton Field             | 145    | 1,988   | 110    | 50    | 11    | 434    | 11    | 6     | ..    | 1   | 51     | 4,726   | 1.0  | 267 |
| 268 | " Town Bottom            | 90     | 557     | ..     | 21    | ..    | 871    | 46    | ..    | ..    | 63  | 446    | 3,446   | 12.9 | 268 |
| 269 | Linthwaite               | 330    | 2,905   | ..     | ..    | ..    | 2,905  | 6     | ..    | 42    | ..  | 1,028  | 7,150   | 14.3 | 269 |
| 270 | Liversedge Mutual        | 121    | 560     | ..     | 215   | 3     | 2,106  | 59    | ..    | ..    | 57  | 2,311  | 12,330  | 16.1 | 270 |
| 271 | Longwood                 | 479    | 1,850   | 3,639  | 235   | 260   | 4,274  | 667   | 25    | 173   | 130 | 5,269  | 13,807  | 89.6 | 271 |
| 272 | Luddenden and District   | 476    | 5,990   | 495    | 925   | 521   | 2,896  | 593   | 6     | 22    | 21  | 3,478  | 10,300  | 34.1 | 272 |
| 273 | " Foot                   | 466    | 7,828   | ..     | 925   | 220   | 3,489  | 279   | 5     | 23    | 59  | 3,855  | 13,014  | 29.6 | 273 |
| 274 | Marsden Industrial       | 467    | 3,198   | 220    | 254   | 2,024 | 13,380 | 1,501 | 96    | 975   | 350 | 16,831 | 42,967  | 39.1 | 274 |
| 275 | Masboro'                 | 1,665  | 17,324  | 752    | 1,090 | 900   | 7,639  | 1,501 | 96    | 611   | 408 | 10,255 | 25,950  | 39.5 | 275 |
| 276 | Meltham Industrial       | 639    | 8,280   | ..     | 330   | ..    | 1,319  | 144   | 7     | 126   | 65  | 1,661  | 5,211   | 31.9 | 276 |
| 277 | Meltham Mills            | 127    | 1,195   | ..     | 35    | ..    | 2,201  | 305   | 44    | 163   | 98  | 2,871  | 8,535   | 33.6 | 277 |
| 278 | Mexboro'                 | 374    | 1,591   | 1,350  | 133   | ..    | 2,177  | 3     | ..    | ..    | 105 | 2,235  | 11,097  | 20.6 | 278 |
| 279 | Middlestown              | 278    | 1,451   | 100    | 195   | 22    | 1,938  | 674   | 8     | 83    | 27  | 2,730  | 8,931   | 30.5 | 279 |
| 280 | Midgley                  | 347    | 5,443   | ..     | 116   | 128   | 1,425  | 15    | ..    | 58    | 46  | 1,544  | 16,465  | 9.3  | 280 |
| 281 | Milnsbridge              | 538    | 4,579   | ..     | 435   | 2,508 | 3,565  | 676   | 4     | 575   | 139 | 6,959  | 25,902  | 26.8 | 281 |
| 282 | Mirfield—Industrial      | 908    | 15,894  | 977    | ..    | ..    | 1,333  | 32    | ..    | 5     | 5   | 170    | 332     | 51.2 | 282 |
| 283 | " Perseverance           | 71     | 337     | ..     | ..    | ..    | 18,129 | 700   | 182   | 246   | 124 | 19,331 | 81,233  | 23.8 | 283 |
| 284 | Morley                   | 3,554  | 33,297  | 413    | 1,505 | 5,869 | 18,129 | 700   | 182   | 246   | 124 | 19,331 | 81,233  | 23.8 | 284 |
| 285 | Mytholmroyd              | 530    | 13,463  | ..     | 265   | 3,187 | 3,558  | 301   | 3     | 83    | 78  | 4,023  | 14,711  | 27.3 | 285 |
| 286 | Netherthong              | 127    | 985     | ..     | 62    | 8     | 1,306  | 98    | 2     | 1     | 34  | 1,543  | 3,148   | 30.0 | 286 |
| 287 | Netherton                | 361    | 4,712   | ..     | 135   | 70    | 1,306  | 62    | ..    | 131   | 44  | 1,543  | 10,448  | 14.8 | 287 |
| 288 | New Road Side            | 264    | 3,278   | 50     | 145   | 204   | 1,227  | ..    | ..    | ..    | 2   | 1,229  | 5,844   | 21.0 | 288 |
| 289 | Oakworth                 | 283    | 2,297   | ..     | 160   | 2     | 1,238  | 4     | ..    | ..    | ..  | 1,242  | 6,952   | 17.8 | 289 |
| 290 | Ossett                   | 1,752  | 18,123  | ..     | 415   | 19    | 3,437  | 65    | ..    | ..    | 11  | 3,513  | 49,622  | 7.0  | 290 |
| 291 | Oughtybridge             | 221    | 777     | 922    | 85    | 74    | 1,712  | 99    | 1     | 235   | 58  | 2,105  | 6,782   | 31.0 | 291 |
| 292 | Oxenhope                 | 140    | 935     | 40     | 85    | 70    | 996    | ..    | 1     | 4     | 31  | 1,455  | 4,296   | 23.1 | 292 |
| 293 | Paddock                  | 312    | 1,801   | 765    | 94    | 146   | 1,167  | 232   | ..    | 10    | 16  | 1,283  | 3,187   | 19.6 | 293 |
| 294 | Pocket Well              | 129    | 2,615   | ..     | 65    | ..    | 1,081  | 176   | 1     | 51    | 89  | 2,499  | 3,455   | 40.2 | 294 |
| 295 | Pontefract               | 230    | 634     | ..     | 26    | ..    | 1,394  | 24    | ..    | ..    | ..  | 2,499  | 3,455   | 60.7 | 295 |
| 296 | Primrose Hill            | 172    | 1,303   | 600    | 16    | ..    | 187    | 1,547 | ..    | 409   | 84  | 7,119  | 30,014  | 4.3  | 296 |
| 297 | Queensbury               | 995    | 11,377  | ..     | 475   | 6     | 5,079  | ..    | ..    | ..    | ..  | 1,130  | 6,125   | 23.7 | 297 |
| 298 | Ravensthorpe             | 201    | 3,482   | ..     | 120   | 287   | 1,126  | 4     | ..    | ..    | 66  | 1,130  | 6,125   | 18.4 | 298 |
| 299 | " Self-Help              | 1,028  | 16,810  | 1,003  | 500   | 246   | 5,099  | 795   | 322   | 499   | ..  | 6,781  | 27,137  | 24.9 | 299 |
| 300 | Rawdon                   | 339    | 2,692   | ..     | ..    | ..    | 905    | ..    | ..    | ..    | ..  | 905    | 9,060   | 9.9  | 300 |
| 301 | Riccall                  | 130    | 163     | 156    | ..    | 180   | 476    | 330   | ..    | ..    | 91  | 2,693  | 1,986   | 24.0 | 301 |
| 302 | Ripponden                | 375    | 4,390   | ..     | 175   | ..    | 2,148  | ..    | ..    | 124   | ..  | 2,693  | 8,323   | 32.3 | 302 |
| 303 | Saxby                    | 48     | 49      | 137    | ..    | ..    | 138    | 3     | ..    | ..    | ..  | 162    | 1,631   | 9.6  | 303 |

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                        | No. of Members at end of Year. | Total Capital. at end of Year. |       | Capital Invested with C. W. S. at end of Year. |        | Purchases from C. W. S. during the Year. |          |                |                  |                        |         | Total Sales during Year. | Percentage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|------------------------------|--------------------------------|--------------------------------|-------|------------------------------------------------|--------|------------------------------------------|----------|----------------|------------------|------------------------|---------|--------------------------|-----------------------------------------------------------|---------|
|         |                              |                                | Share.                         | Loan. | Share.                                         | Loan.  | Grocery & Provisions.                    | Drapery. | Woollen Cloth. | Boots and Shoes. | Furniture & Hard-ware. | Total.  |                          |                                                           |         |
| 304     | YORKSHIRE—Con.               |                                |                                |       |                                                |        |                                          |          |                |                  |                        |         |                          |                                                           |         |
| 305     | Scapegoat Hill .....         | 156                            | £ 848                          | £ 365 | £ 75                                           | £ 46   | £ 1,566                                  | £ 175    | £ 1            | £ 24             | £ 61                   | £ 1,837 | £ 2,041                  | 89.5                                                      | 304     |
| 306     | Scissett .....               | 224                            | 912                            | 170   | ..                                             | ..     | 572                                      | ..       | ..             | 1                | 19                     | 592     | 6,170                    | 9.6                                                       | 305     |
| 307     | Settle .....                 | 250                            | 1,163                          | ..    | 70                                             | 21     | 443                                      | ..       | ..             | ..               | 32                     | 475     | 4,540                    | 10.4                                                      | 306     |
| 308     | Shepperton .....             | 44                             | 163                            | ..    | ..                                             | ..     | 153                                      | 1        | ..             | ..               | ..                     | 155     | 1,100                    | 14.1                                                      | 307     |
| 309     | Sheepbridge .....            | 197                            | 1,990                          | ..    | ..                                             | ..     | 251                                      | ..       | ..             | ..               | ..                     | 251     | 6,958                    | 3.6                                                       | 308     |
| 310     | Sheffield—Trippet Lane ..... | 3,057                          | 13,560                         | ..    | 2,170                                          | 114    | 4,302                                    | 366      | 3              | 386              | 67                     | 5,124   | 25,520                   | 20.0                                                      | 309     |
| 311     | Shelly .....                 | 251                            | 1,820                          | 100   | ..                                             | ..     | 405                                      | 58       | ..             | ..               | 10                     | 478     | 6,214                    | 7.6                                                       | 310     |
| 312     | Shepley .....                | 194                            | 910                            | 1,118 | 120                                            | 32     | 680                                      | 91       | ..             | 24               | 21                     | 816     | 3,092                    | 2.6                                                       | 311     |
| 313     | Siddall .....                | 228                            | 1,745                          | ..    | 95                                             | 98     | 1,796                                    | 210      | ..             | ..               | 14                     | 2,020   | 5,423                    | 87.2                                                      | 312     |
| 314     | Sladen .....                 | 529                            | 4,002                          | ..    | 240                                            | 144    | 3,900                                    | 129      | 10             | 51               | 151                    | 4,241   | 13,278                   | 31.9                                                      | 313     |
| 315     | Skelmanthorpe .....          | 129                            | 1,095                          | ..    | 3                                              | ..     | 285                                      | ..       | ..             | ..               | ..                     | 285     | 3,499                    | 8.1                                                       | 314     |
| 316     | Slapton .....                | 439                            | 2,690                          | 724   | 90                                             | ..     | 3,636                                    | 231      | ..             | 122              | 105                    | 4,094   | 8,865                    | 46.2                                                      | 315     |
| 317     | Slathwaite .....             | 1,360                          | 14,556                         | 230   | 680                                            | 1,049  | 9,774                                    | 787      | 27             | 800              | 300                    | 11,688  | 44,999                   | 25.9                                                      | 316     |
| 318     | Sowerby Bridge .....         | 2,660                          | 33,476                         | 3,623 | 2,600                                          | 856    | 23,433                                   | 363      | 21             | 1,121            | 706                    | 25,649  | 99,785                   | 25.7                                                      | 317     |
| 319     | Stainland .....              | 563                            | 9,193                          | ..    | 305                                            | 3,608  | 3,106                                    | 319      | 11             | 72               | 48                     | 3,556   | 10,340                   | 34.4                                                      | 318     |
| 320     | Steeeton .....               | 190                            | 661                            | 90    | 80                                             | 42     | 1,711                                    | 152      | ..             | ..               | 81                     | 1,951   | 3,942                    | 3.5                                                       | 319     |
| 321     | Stocksbridge .....           | 1,070                          | 16,974                         | 359   | 550                                            | 9,696  | 4,065                                    | 31       | 55             | ..               | 171                    | 4,822   | 18,860                   | 22.9                                                      | 320     |
| 322     | Sutton Mills .....           | 160                            | 2,117                          | ..    | ..                                             | ..     | 154                                      | ..       | ..             | ..               | 6                      | 165     | 3,817                    | 4.3                                                       | 321     |
| 323     | Thirsk .....                 | 212                            | 212                            | ..    | ..                                             | ..     | 176                                      | ..       | ..             | ..               | 8                      | 184     | 2,296                    | 8.0                                                       | 322     |
| 324     | Thornes .....                | 297                            | 1,876                          | ..    | 100                                            | 34     | 2,854                                    | 472      | 57             | 168              | 228                    | 3,279   | 7,291                    | 44.9                                                      | 323     |
| 325     | Todmorden—Dale Street .....  | 3,007                          | 77,036                         | ..    | 1,420                                          | 13,923 | 24,109                                   | 903      | 200            | 1,305            | 195                    | 26,712  | 101,672                  | 26.2                                                      | 324     |
| 326     | Tong Park, Baldon .....      | 58                             | 908                            | ..    | 30                                             | 3      | 405                                      | 52       | 3              | ..               | 1                      | 461     | 1,792                    | 25.7                                                      | 325     |
| 327     | Upper Hopton .....           | 131                            | 1,483                          | 205   | ..                                             | ..     | 1,003                                    | 27       | 2              | 26               | 30                     | 1,088   | 4,257                    | 25.5                                                      | 326     |
| 328     | Uppertown .....              | 725                            | 9,986                          | ..    | 360                                            | 987    | 7,451                                    | 204      | 1              | 98               | 56                     | 7,810   | 21,488                   | 36.4                                                      | 327     |
| 329     | Wainstalls .....             | 234                            | 1,393                          | ..    | 115                                            | 77     | 1,348                                    | 294      | ..             | 62               | 7                      | 1,418   | 6,757                    | 20.9                                                      | 328     |
| 330     | Wakfield—Borough .....       | 189                            | 2,259                          | ..    | 100                                            | 1      | 1,428                                    | 294      | ..             | 59               | 17                     | 1,798   | 6,148                    | 20.2                                                      | 329     |
| 331     | Wakfield—Industrial .....    | 239                            | 1,849                          | ..    | 77                                             | ..     | 1,689                                    | 176      | ..             | 118              | 63                     | 2,041   | 5,981                    | 34.1                                                      | 330     |
|         | ..                           | 2,602                          | 21,065                         | ..    | 438                                            | ..     | 4,187                                    | ..       | ..             | ..               | 15                     | 4,202   | 61,454                   | 6.8                                                       | 331     |



|     |                              |          |        |        |         |         |        |       |        |        |         |       |     |
|-----|------------------------------|----------|--------|--------|---------|---------|--------|-------|--------|--------|---------|-------|-----|
| 332 | Whitby .....                 | 675      | 2,613  | 117    | ..      | 2,735   | ..     | ..    | ..     | 2,735  | 10,498  | 26-2  | 332 |
| 333 | Whitwood .....               | 185      | 602    | 11     | ..      | 496     | ..     | ..    | ..     | 496    | 5,400   | 9-2   | 333 |
| 334 | Wibsey .....                 | 157      | 2,193  | 75     | 84      | 586     | ..     | ..    | ..     | 637    | 5,002   | 12-7  | 334 |
| 335 | Wilsden .....                | 241      | 2,020  | 120    | 25      | 942     | ..     | ..    | ..     | 948    | 6,144   | 18-4  | 335 |
| 336 | Windhill .....               | 2,554    | 27,946 | 1,250  | 1,795   | 23,777  | 1,900  | 165   | 1,373  | 28,023 | 79,526  | 35-2  | 336 |
| 337 | Wooldale .....               | 57       | 187    | ..     | ..      | 26      | ..     | ..    | ..     | 26     | 280     | 9-8   | 337 |
| 338 | Wortley .....                | 428      | 3,200  | 181    | ..      | 2,440   | ..     | ..    | ..     | 2,508  | 9,318   | 26-9  | 338 |
| 339 | York Equitable .....         | 184      | 709    | 66     | ..      | 1,064   | 40     | ..    | 6      | 1,197  | 2,556   | 44-5  | 339 |
|     | 161,818                      | 197,1861 | 71,158 | 62,945 | 152,876 | 839,653 | 67,908 | 4,530 | 38,038 | 15,797 | 965,926 | 23-4  |     |
|     | CARNARVONSHIRE.              |          |        |        |         |         |        |       |        |        |         |       |     |
| 340 | New York .....               | 127      | 117    | 33     | ..      | 629     | ..     | ..    | ..     | 33     | 2,508   | 26-4  | 340 |
|     |                              | 127      | 117    | 33     | ..      | 629     | ..     | ..    | ..     | 33     | 662     | 26-4  |     |
|     | CHESHIRE.                    |          |        |        |         |         |        |       |        |        |         |       |     |
| 341 | Broadbottom .....            | 370      | 4,185  | 220    | 468     | 2,000   | 202    | 6     | 181    | 109    | 11,137  | 23-2  | 341 |
| 342 | Chester .....                | 248      | 515    | 74     | ..      | 1,772   | 2      | ..    | 7      | 18     | 8,594   | 50-0  | 342 |
| 343 | Compstall .....              | 2,201    | 9,649  | 960    | 3,122   | 17,635  | 622    | ..    | 621    | 240    | 42,040  | 45-5  | 343 |
| 344 | Cogleton .....               | 1,254    | 10,400 | 670    | 1,073   | 7,347   | 432    | ..    | 338    | 127    | 38,365  | 24-9  | 344 |
| 345 | *Crewe-Albert .....          | 66       | 405    | 70     | 6       | 614     | 30     | ..    | 8      | 21     | 2,268   | 29-7  | 345 |
| 346 | " Colnden Industrial .....   | 43       | 66     | 35     | 5       | 233     | 26     | ..    | ..     | 23     | 954     | 29-5  | 346 |
| 347 | " Friendly .....             | 3,138    | 56,073 | 677    | 7,275   | 28,874  | 2,690  | 869   | 1,298  | 1,773  | 35,513  | 27-2  | 347 |
| 348 | + " Grosvenor Street .....   | 133      | 425    | 60     | 1       | 822     | 8      | ..    | 38     | ..     | 871     | 22-1  | 348 |
| 349 | Disley .....                 | 134      | 8,392  | 65     | 205     | 932     | 113    | 12    | 52     | 85     | 1,194   | 3,941 | 349 |
| 350 | Dukinfield .....             | 439      | 1,135  | 190    | 12      | 2,738   | 243    | 10    | 135    | 348    | 8,265   | 36-6  | 350 |
| 351 | Hazel Grove .....            | 792      | 10,821 | 365    | 709     | 6,642   | 205    | 183   | 482    | 148    | 3,474   | 55-4  | 351 |
| 352 | Hollingsworth .....          | 764      | 10,898 | 345    | 1,222   | 6,596   | 4      | 5     | 64     | 6      | 22,182  | 16-4  | 352 |
| 353 | Hyde .....                   | 1,947    | 25,468 | 1,110  | 3,253   | 16,095  | 973    | 54    | 683    | 260    | 23,596  | 28-3  | 353 |
| 354 | Macclesfield .....           | 2,988    | 32,309 | 2,000  | 12,108  | 12,063  | 1,326  | 241   | 680    | 167    | 42,118  | 42-6  | 354 |
| 355 | Makin's Bank .....           | 46       | 292    | 20     | 76      | 492     | 61     | ..    | 2      | 14     | 14,497  | 24-2  | 355 |
| 356 | Mow Cop .....                | 39       | 271    | ..     | ..      | 175     | 2      | ..    | 1      | ..     | 1,425   | 33-6  | 356 |
| 357 | *Nantwich .....              | 304      | 1,707  | 160    | 2       | 1,315   | 80     | ..    | 1      | ..     | 1,083   | 16-4  | 357 |
| 358 | Poynton and Worth .....      | 208      | 3,152  | 105    | 190     | 2,314   | 325    | 65    | 151    | 19     | 7,789   | 18-1  | 358 |
| 359 | Runcorn .....                | 1,340    | 22,203 | 670    | 3,783   | 22,177  | 3,218  | 208   | 861    | 132    | 2,987   | 35-0  | 359 |
| 360 | Sandbach .....               | 777      | 8,544  | 390    | 2,451   | 8,647   | 1,052  | 111   | 8      | 183    | 64,804  | 41-5  | 360 |
| 361 | *Stockport-Chestergate ..... | 1,740    | 31,932 | 870    | 173     | 3,643   | 269    | ..    | 263    | 124    | 20,113  | 24-8  | 361 |
| 362 | " Great Moor .....           | 141      | 1,263  | 70     | 9       | 207     | 246    | 1     | 8      | 45     | 39,256  | 10-9  | 362 |
| 363 | Slyal .....                  | 181      | 1,162  | 85     | 16      | 1,726   | 96     | 1     | 165    | 87     | 4,545   | 11-1  | 363 |
| 364 | Winnington .....             | 214      | 400    | 78     | 5       | 2,698   | 5      | ..    | 78     | 50     | 5,068   | 40-9  | 364 |
| 365 | Winsford .....               | 680      | 6,123  | ..     | ..      | 1,652   | 23     | ..    | 36     | 83     | 6,512   | 42-4  | 365 |
| 366 | Woodley .....                | 343      | 8,576  | 140    | 482     | 3,461   | 303    | 32    | 81     | 129    | 15,794  | 11-4  | 366 |
|     |                              |          |        |        |         |         |        |       |        |        | 10,526  | 38-0  |     |
|     | 20,532                       | 216,074  | 52,598 | 11,752 | 36,646  | 143,640 | 12,670 | 1,806 | 6,392  | 4,664  | 169,082 | 29-6  |     |
|     | CUMBERLAND.                  |          |        |        |         |         |        |       |        |        |         |       |     |
| 367 | Holborn Hill, Millom .....   | 1,007    | 13,528 | 470    | 1,643   | 4,475   | 716    | 63    | 755    | 271    | 25,118  | 25-1  | 367 |
| 368 | Whitehaven .....             | 146      | 609    | 77     | ..      | 655     | 8      | 7     | 55     | 2      | 2,567   | 28-4  | 368 |
|     |                              | 1,153    | 14,137 | 547    | 1,643   | 5,130   | 724    | 70    | 840    | 273    | 7,087   | 25-4  |     |

# CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                  | No. of Members at end of Year. | Total Capital at end of Year. |       | Capital Invested with C. W. S. at end of Year. |       | Purchases from C. W. S. during the Year. |          |                |                  |                        | Total Sales during Year. | Percentage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|------------------------|--------------------------------|-------------------------------|-------|------------------------------------------------|-------|------------------------------------------|----------|----------------|------------------|------------------------|--------------------------|-----------------------------------------------------------|---------|
|         |                        |                                | Share.                        | Loan. | Share.                                         | Loan. | Grocery & Provisions.                    | Drapery. | Woollen Cloth. | Boots and Shoes. | Furniture & Hard-ware. | Total.                   |                                                           |         |
| 369     | DENBIGHSHIRE.          |                                | £                             | £     | £                                              | £     | £                                        | £        | £              | £                | £                      | £                        | £                                                         |         |
| 370     | Brynbo                 | 210                            | 591                           | 100   | 115                                            | 9     | 813                                      | 13       | 8              | 17               | 100                    | 951                      | 1,677                                                     | 969     |
|         | Rhos                   | 56                             | 170                           |       | 2                                              |       | 375                                      |          |                |                  | 20                     | 395                      | 474                                                       | 970     |
|         |                        | 266                            | 761                           | 100   | 117                                            | 9     | 1,188                                    | 13       | 8              | 17               | 120                    | 1,346                    | 2,151                                                     | 626     |
| 371     | DERBYSHIRE.            |                                |                               |       |                                                |       |                                          |          |                |                  |                        |                          |                                                           |         |
| 372     | +Belper                | 194                            | 1,058                         | 1,100 | 70                                             | 18    | 251                                      | 11       |                | 2                |                        | 264                      | 1,194                                                     | 371     |
| 373     | Borrowash              | 163                            | 1,122                         |       | 80                                             | 15    | 674                                      | 66       |                |                  | 6                      | 746                      | 2,872                                                     | 372     |
| 374     | +Buxton                | 94                             | 872                           | 557   | 135                                            | 46    | 1,100                                    | 13       | 7              | 57               | 57                     | 1,243                    | 1,137                                                     | 973     |
| 375     | Chisworth              | 152                            | 693                           |       | 55                                             | 89    | 1,354                                    | 97       |                | 104              | 73                     | 1,628                    | 3,533                                                     | 374     |
| 376     | Church Gresley         | 202                            | 1,831                         | 650   | 8                                              |       | 307                                      |          |                |                  |                        | 307                      | 1,496                                                     | 375     |
| 377     | Clay Cross             | 378                            | 2,871                         | 2,968 | 118                                            |       | 2,188                                    | 325      | 21             |                  | 16                     | 2,550                    | 8,873                                                     | 376     |
| 378     | Codnor Park            | 287                            | 828                           |       |                                                |       | 267                                      | 12       | 14             |                  | 13                     | 306                      | 5,822                                                     | 377     |
| 379     | Derby                  | 5,179                          | 82,858                        |       | 2,185                                          | 2,806 | 25,289                                   | 1,368    | 217            | 1,187            | 522                    | 28,593                   | 109,127                                                   | 378     |
| 380     | +Dove Holes            | 187                            | 1,442                         | 1,076 | 65                                             | 90    | 662                                      | 2        |                | 56               | 10                     | 730                      | 2,870                                                     | 379     |
| 381     | Doveridge              | 66                             | 454                           | 800   | 50                                             | 15    | 454                                      |          |                |                  | 12                     | 466                      | 2,199                                                     | 380     |
| 382     | Draycott and Wilne     | 131                            | 728                           |       | 65                                             | 381   | 803                                      | 73       | 6              |                  | 5                      | 892                      | 2,506                                                     | 381     |
| 383     | Eckington              | 90                             | 428                           |       | 45                                             | 57    | 678                                      | 2        |                |                  | 7                      | 687                      | 1,848                                                     | 382     |
| 384     | Glossop                | 1,610                          | 24,851                        | 100   | 800                                            | 2,940 | 19,877                                   | 943      | 158            | 527              | 318                    | 21,823                   | 49,060                                                    | 383     |
| 385     | Grassmoor and District | 154                            | 219                           |       | 49                                             |       | 204                                      |          |                |                  | 4                      | 208                      | 1,814                                                     | 384     |
| 386     | Great Rocks            | 70                             | 469                           |       | 35                                             |       | 476                                      |          |                |                  | 13                     | 489                      | 1,801                                                     | 385     |
| 387     | Hadfield               | 1,564                          | 21,023                        | 4,946 | 780                                            | 3,446 | 11,273                                   | 700      |                | 222              | 464                    | 12,659                   | 40,772                                                    | 386     |
| 388     | Hayfield               | 528                            | 4,418                         | 200   | 255                                            | 1,035 | 4,210                                    | 671      | 135            | 391              | 208                    | 5,615                    | 11,286                                                    | 387     |
| 389     | Langley Mill           | 650                            | 3,175                         |       | 184                                            | 146   | 5,409                                    | 522      | 58             | 487              | 213                    | 6,689                    | 12,965                                                    | 388     |
| 390     | +Lea and Holloway      | 250                            | 2,472                         | 1,073 | 250                                            | 205   | 1,472                                    | 475      | 73             | 243              | 236                    | 2,499                    | 6,321                                                     | 389     |
| 391     | Little Eaton           | 90                             | 245                           |       | 60                                             | 2     | 395                                      | 6        |                |                  |                        | 401                      | 1,442                                                     | 390     |
| 392     | Long Eaton             | 1,172                          | 21,495                        | 731   | 555                                            | 171   | 275                                      | 1,065    | 109            | 194              | 136                    | 6,839                    | 34,260                                                    | 391     |
|         | Matlock Bank           | 380                            | 1,497                         | 43    | 155                                            | 114   | 1,199                                    | 71       | 52             | 85               | 71                     | 1,478                    | 5,723                                                     | 392     |



|                 |                                  |        |         |        |       |        |         |        |       |       |       |         |         |      |     |
|-----------------|----------------------------------|--------|---------|--------|-------|--------|---------|--------|-------|-------|-------|---------|---------|------|-----|
| 393             | Mayfield .....                   | 132    | 649     | ..     | 55    | 54     | 1,532   | 41     | 2     | 64    | 22    | 1,661   | 3,674   | 45.2 | 393 |
| 394             | Milford .....                    | 77     | 321     | ..     | 50    | 1      | 249     | 18     | 87    | ..    | 12    | 279     | 1,463   | 19.0 | 394 |
| 395             | New Mills .....                  | 870    | 10,555  | ..     | 420   | 1,702  | 6,394   | 306    | ..    | 454   | 277   | 7,518   | 21,315  | 35.2 | 395 |
| 396             | Peak Forest .....                | 57     | 589     | ..     | 30    | 40     | 412     | ..     | ..    | ..    | 3     | 415     | 2,090   | 19.8 | 396 |
| 397             | Pinxton .....                    | 107    | 885     | ..     | ..    | ..     | 142     | 69     | ..    | 6     | 54    | 271     | 3,821   | 7.1  | 397 |
| 398             | Pleasley and Pleasley Hill ..... | 120    | 760     | 235    | ..    | ..     | 460     | 127    | 91    | 67    | 16    | 761     | 2,734   | 25.6 | 398 |
| 399             | Pleasley Works .....             | 170    | 1,351   | 30     | ..    | 2      | 295     | 49     | 884   | 2,133 | 2     | 349     | 5,340   | 6.5  | 399 |
| 400             | Ripley .....                     | 2,739  | 28,152  | ..     | 1,500 | 1,579  | 23,783  | 2,572  | ..    | ..    | 609   | 29,981  | 60,070  | 49.9 | 400 |
| 401             | Sawley .....                     | 123    | 965     | 189    | 65    | 190    | 732     | 49     | ..    | ..    | 25    | 806     | 2,091   | 38.5 | 401 |
| 402             | Spendon .....                    | 229    | 1,523   | 197    | 100   | 286    | 1,329   | 99     | ..    | ..    | ..    | 1,429   | 3,250   | 43.9 | 402 |
| 403             | Staveley—Speedwell .....         | 145    | 612     | ..     | 20    | 57     | 386     | ..     | ..    | 1     | 4     | 391     | 6,950   | 56.2 | 403 |
| 404             | Whaley Bridge .....              | 354    | 4,263   | 108    | 150   | 122    | 2,276   | 80     | 99    | 202   | 115   | 2,772   | 11,016  | 25.1 | 404 |
| 405             | Whitehough .....                 | 106    | 542     | 195    | 52    | 73     | 734     | 145    | 28    | 102   | 50    | 1,049   | 2,224   | 47.1 | 405 |
| 406             | Youghreave .....                 | 179    | 382     | 250    | 85    | 121    | 2,365   | 823    | 56    | 161   | 203   | 3,108   | 7,396   | 42.0 | 406 |
|                 |                                  | 18,999 | 226,503 | 15,488 | 8,581 | 15,808 | 124,915 | 10,305 | 2,087 | 6,748 | 8,837 | 147,842 | 438,355 | 83.7 |     |
| LEICESTERSHIRE. |                                  |        |         |        |       |        |         |        |       |       |       |         |         |      |     |
| 407             | Ansty .....                      | 85     | 282     | ..     | 10    | ..     | 491     | ..     | ..    | ..    | ..    | 491     | 1,203   | 40.8 | 407 |
| 408             | Barwell .....                    | 260    | 2,464   | ..     | 21    | ..     | 661     | ..     | ..    | ..    | ..    | 677     | 5,796   | 11.8 | 408 |
| 409             | Broughton Astley .....           | 62     | 179     | ..     | 2     | ..     | 135     | ..     | ..    | ..    | ..    | 195     | 832     | 23.4 | 409 |
| 410             | Burbage .....                    | 336    | 1,808   | ..     | ..    | ..     | 202     | 204    | ..    | ..    | ..    | 202     | 5,533   | 3.6  | 410 |
| 411             | Coalville .....                  | 190    | 158     | 283    | 46    | ..     | 1,282   | ..     | 5     | 154   | 73    | 1,718   | 8,488   | 49.2 | 411 |
| 412             | Groft .....                      | 127    | 303     | 131    | 12    | ..     | 430     | ..     | ..    | ..    | 25    | 455     | 2,885   | 15.8 | 412 |
| 413             | *Gnderby .....                   | 411    | 4,077   | ..     | 205   | 77     | 8,155   | 646    | 164   | 520   | 205   | 4,690   | 11,270  | 41.6 | 413 |
| 414             | Glenfield .....                  | 95     | 479     | 279    | 31    | ..     | 632     | 89     | ..    | 33    | 14    | 768     | 1,850   | 41.5 | 414 |
| 415             | Great Glen .....                 | 96     | 238     | 100    | ..    | ..     | 235     | ..     | ..    | ..    | ..    | 235     | 2,502   | 9.4  | 415 |
| 416             | Great Wigston .....              | 488    | 4,036   | 2,123  | 215   | ..     | 2,211   | 291    | 98    | 193   | 35    | 2,923   | 11,700  | 24.9 | 416 |
| 417             | Groby .....                      | 88     | 781     | ..     | 50    | 54     | 579     | 93     | ..    | 42    | 12    | 726     | 1,916   | 37.9 | 417 |
| 418             | Hathern .....                    | 160    | 1,802   | 272    | 80    | 174    | 784     | 68     | ..    | 9     | ..    | 861     | 3,289   | 26.1 | 418 |
| 419             | Hinckley .....                   | 520    | 7,470   | ..     | 115   | 184    | 3,544   | 11     | ..    | 18    | ..    | 3,573   | 20,103  | 17.7 | 419 |
| 420             | Leicester .....                  | 8,008  | 81,953  | 13,179 | 8,450 | 921    | 13,272  | 1,608  | 538   | 2,560 | 226   | 18,204  | 143,362 | 12.7 | 420 |
| 421             | *Loughborough .....              | 209    | 1,177   | 2,444  | 115   | 92     | 435     | 22     | ..    | 8     | 1     | 461     | 1,759   | 26.2 | 421 |
| 422             | *Lutterworth .....               | 135    | 173     | 156    | 19    | ..     | 388     | ..     | 2     | 12    | 13    | 415     | 1,823   | 22.7 | 422 |
| 423             | Markfield .....                  | 106    | 953     | 400    | 50    | 6      | 548     | 110    | 44    | 56    | 2     | 760     | 2,168   | 35.0 | 423 |
| 424             | Mount Sorrel .....               | 37     | 70      | ..     | ..    | ..     | 14      | ..     | ..    | ..    | ..    | 14      | 596     | 2.3  | 424 |
| 425             | Oadby .....                      | 117    | 686     | 505    | 1     | ..     | 450     | 69     | ..    | 52    | 11    | 582     | 2,204   | 26.4 | 425 |
| 426             | *Ratby .....                     | 88     | 162     | 17     | 8     | ..     | 229     | 28     | ..    | 40    | ..    | 297     | 1,120   | 26.5 | 426 |
| 427             | Sheepshed .....                  | 418    | 4,576   | 1,296  | 224   | 293    | 2,200   | 500    | 40    | 184   | 133   | 3,057   | 7,781   | 99.3 | 427 |
| 428             | Stony Stanton .....              | 120    | 337     | 102    | ..    | ..     | 143     | ..     | ..    | ..    | 13    | 156     | 2,017   | 7.7  | 428 |
|                 |                                  | 12,151 | 113,564 | 21,287 | 4,657 | 1,825  | 92,080  | 3,839  | 886   | 3,876 | 779   | 41,460  | 235,137 | 17.6 |     |
| LINGOLNSHIRE.   |                                  |        |         |        |       |        |         |        |       |       |       |         |         |      |     |
| 429             | *Boston .....                    | 288    | 858     | ..     | 125   | 22     | 1,598   | ..     | ..    | 175   | 7     | 1,770   | 4,328   | 40.9 | 429 |
| 430             | Gainsborough .....               | 838    | 6,527   | 183    | 340   | 210    | 5,577   | 643    | 63    | 188   | 97    | 6,568   | 14,967  | 43.9 | 430 |
| 431             | Grantham .....                   | 837    | 5,337   | 3,500  | 380   | 5      | 4,035   | 575    | 235   | 354   | 41    | 5,240   | 20,295  | 25.8 | 431 |
| 432             | Great Grimsby .....              | 1,954  | 2,549   | 5,400  | 500   | 7      | 13,633  | 71     | 51    | 452   | 328   | 14,535  | 42,527  | 34.1 | 432 |
| 433             | Hackthorne .....                 | 45     | 49      | 10     | ..    | ..     | 121     | 24     | ..    | 20    | 2     | 167     | 595     | 28.0 | 433 |
| 434             | Lincoln .....                    | 4,448  | 45,770  | 13,846 | 2,010 | 26     | 20,631  | 4,262  | 1,311 | 2,443 | 292   | 28,939  | 102,090 | 28.3 | 434 |

# CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                     | No. of Members at end of Year. | Total Capital at end of Year. |        | Capital Invested with C. W. S. at end of Year. |       | Purchases from C. W. S. during the Year. |          |                |                       | Total Sales during Year. | Per-centage of Pur-chases from C. W. S. on the Total Sales. | Number. |
|---------|---------------------------|--------------------------------|-------------------------------|--------|------------------------------------------------|-------|------------------------------------------|----------|----------------|-----------------------|--------------------------|-------------------------------------------------------------|---------|
|         |                           |                                | Share.                        | Loan.  | Share.                                         | Loan. | Grocery & Pro-visions.                   | Drapery. | Woollen Cloth. | Boots and Hard-Shoes. | Furni-ture & Hard-ware.  | Total.                                                      |         |
| 435     | LINCOLNSHIRE—Con.         |                                |                               |        |                                                |       |                                          |          |                |                       |                          |                                                             |         |
| 436     | †Louth .....              | 122                            | £ 133                         | ..     | £ 27                                           | ..    | 27                                       | ..       | ..             | ..                    | £ 27                     | £ 644                                                       | 42      |
| 437     | †Market Rasen .....       | 240                            | 883                           | ..     | 794                                            | ..    | 794                                      | 224      | 42             | 5                     | 42                       | 1,107                                                       | 14.9    |
| 437     | †Scunthorpe .....         | 248                            | 1,383                         | ..     | 1,573                                          | ..    | 1,573                                    | ..       | ..             | ..                    | 53                       | 1,626                                                       | 22.5    |
| 438     | MERONETHSHIRE.            |                                |                               |        |                                                |       |                                          |          |                |                       |                          |                                                             |         |
| 438     | *Blaenau Ffestiniog ..... | 9,040                          | 63,489                        | 23,873 | 270                                            | 3,365 | 47,979                                   | 5,799    | 1,702          | 3,637                 | 862                      | 59,979                                                      | 29.9    |
| 439     | MONTGOMERYSHIRE.          |                                |                               |        |                                                |       |                                          |          |                |                       |                          |                                                             |         |
| 439     | Newtown .....             | 1,303                          | 5,465                         | 882    | ..                                             | 412   | 2,980                                    | 347      | 176            | 754                   | 64                       | 4,321                                                       | 23.7    |
| 439     | Newtown .....             | 1,303                          | 5,465                         | 882    | ..                                             | 412   | 2,980                                    | 347      | 176            | 754                   | 64                       | 4,321                                                       | 23.7    |
| 439     | Newtown .....             | 359                            | 2,596                         | ..     | 90                                             | 185   | 1,988                                    | 86       | 21             | 164                   | 31                       | 2,290                                                       | 50.2    |
| 440     | NOTTINGHAMSHIRE.          |                                |                               |        |                                                |       |                                          |          |                |                       |                          |                                                             |         |
| 440     | Bulwell .....             | 359                            | 2,596                         | ..     | 90                                             | 185   | 1,988                                    | 86       | 21             | 164                   | 31                       | 2,290                                                       | 50.2    |
| 441     | Calverton .....           | 487                            | 1,457                         | ..     | 62                                             | 220   | 2,575                                    | ..       | ..             | ..                    | 19                       | 2,594                                                       | 18.4    |
| 442     | †Cinder Hill .....        | 157                            | 765                           | ..     | ..                                             | 80    | 538                                      | 6        | ..             | ..                    | 12                       | 556                                                         | 23.5    |
| 443     | †East Bridgford .....     | 121                            | 516                           | 13     | 34                                             | 65    | 824                                      | 85       | ..             | 95                    | 10                       | 1,014                                                       | 32.0    |
| 444     | Hucknall Torkard .....    | 68                             | 347                           | ..     | ..                                             | ..    | 124                                      | 5        | 4              | ..                    | 1                        | 134                                                         | 11.8    |
| 445     | Keyworth .....            | 907                            | 5,205                         | 1,424  | 348                                            | 400   | 5,251                                    | 805      | 91             | 590                   | 298                      | 7,035                                                       | 35.4    |
| 446     | Lambley .....             | 35                             | 111                           | 1      | ..                                             | ..    | 153                                      | ..       | ..             | ..                    | 4                        | 157                                                         | 14.3    |
| 447     | Lenton .....              | 27                             | 170                           | 30     | ..                                             | ..    | 245                                      | ..       | ..             | ..                    | ..                       | 245                                                         | 592     |
| 448     | Lowdham .....             | 4,891                          | 17,688                        | 2,141  | 6                                              | 1,567 | 8,001                                    | 2        | ..             | ..                    | 51                       | 8,054                                                       | 41.4    |
| 449     | Mansfield .....           | 169                            | 1,616                         | 300    | 47                                             | 47    | 352                                      | 22       | ..             | ..                    | ..                       | 436                                                         | 22.897  |
| 450     | New Annesley .....        | 1,091                          | 10,325                        | 133    | 68                                             | 275   | 2,633                                    | 419      | 50             | 211                   | 140                      | 3,453                                                       | 12.9    |
| 451     | *Newark .....             | 504                            | 2,591                         | ..     | 390                                            | 250   | 2,987                                    | 740      | 61             | 48                    | 28                       | 3,864                                                       | 3.968   |
| 452     | New Basford .....         | 424                            | 1,730                         | 174    | ..                                             | 174   | 2,108                                    | 1        | ..             | 289                   | 26                       | 2,481                                                       | 12.979  |
| 453     | Radcliffe-on-Trent .....  | 434                            | 2,011                         | 1,178  | 3                                              | 190   | 2,907                                    | 233      | 1              | 291                   | 68                       | 3,500                                                       | 14.655  |
| 453     | Radcliffe-on-Trent .....  | 190                            | 1,939                         | ..     | 24                                             | 100   | 721                                      | 1        | 8              | 3                     | 4                        | 732                                                         | 26.3    |
| 453     | Radcliffe-on-Trent .....  | 190                            | 1,939                         | ..     | 24                                             | 100   | 721                                      | 1        | 8              | 3                     | 4                        | 732                                                         | 53.1    |
| 453     | Radcliffe-on-Trent .....  | 190                            | 1,939                         | ..     | 24                                             | 100   | 721                                      | 1        | 8              | 3                     | 4                        | 732                                                         | 57.9    |
| 453     | Radcliffe-on-Trent .....  | 190                            | 1,939                         | ..     | 24                                             | 100   | 721                                      | 1        | 8              | 3                     | 4                        | 732                                                         | 11.6    |



|                |                                |        |        |        |       |       |        |       |     |       |     |        |         |      |     |
|----------------|--------------------------------|--------|--------|--------|-------|-------|--------|-------|-----|-------|-----|--------|---------|------|-----|
| 454            | Retford .....                  | 525    | 1,454  | 1,657  | ..    | ..    | 2,361  | ..    | ..  | 849   | 30  | 2,740  | 9,002   | 30.4 | 454 |
| 455            | Ruddington .....               | 322    | 3,484  | ..     | 10    | ..    | 379    | ..    | 76  | 271   | 15  | 665    | ..      | 7.9  | 455 |
| 456            | Sandiacre .....                | 240    | 1,634  | ..     | 120   | 268   | 1,380  | ..    | 20  | 13    | 12  | 1,501  | 5,116   | 29.3 | 456 |
| 457            | *Southwell .....               | 28     | 71     | ..     | ..    | ..    | 51     | ..    | ..  | ..    | ..  | 51     | 695     | 7.3  | 457 |
| 458            | Stanton Hill .....             | 51     | 171    | ..     | ..    | ..    | 106    | ..    | ..  | ..    | 1   | 107    | 173     | 61.8 | 458 |
| 459            | Stapleford .....               | 530    | 4,083  | ..     | 235   | 146   | 3,108  | ..    | 448 | 557   | 153 | 4,392  | 11,915  | 36.8 | 459 |
| 460            | Sutton-in-Ashfield .....       | 1,042  | 5,226  | 3,004  | ..    | ..    | 132    | ..    | ..  | ..    | ..  | 182    | 15,007  | 8    | 460 |
| 461            | Workshop .....                 | 472    | 3,607  | 140    | 134   | 36    | 2,547  | ..    | 275 | 264   | 49  | 3,187  | 8,506   | 37.5 | 461 |
|                |                                | 12,715 | 66,126 | 10,087 | 3,867 | 1,385 | 39,543 | 3,118 | 408 | 3,043 | 921 | 47,083 | 172,018 | 27.4 |     |
| SHERIFFS.      |                                |        |        |        |       |       |        |       |     |       |     |        |         |      |     |
| 462            | Bourton .....                  | 56     | 99     | ..     | 40    | 205   | 910    | ..    | ..  | ..    | 4   | 914    | 1,265   | 72.2 | 462 |
| 463            | *Burwarton .....               | 63     | 411    | ..     | 40    | 88    | 1,413  | ..    | 28  | 62    | 97  | 1,540  | 3,399   | 45.3 | 463 |
| 464            | Ironbridge .....               | 96     | 700    | ..     | 54    | ..    | 916    | 61    | 45  | 60    | 22  | 1,104  | 2,171   | 50.9 | 464 |
| 465            | *Oswestry .....                | 85     | 287    | ..     | 75    | ..    | 768    | 1     | 1   | 1     | 20  | 791    | 1,163   | 68.0 | 465 |
| 466            | Tibberton .....                | 52     | 97     | ..     | ..    | ..    | 121    | ..    | ..  | ..    | ..  | 121    | 1,014   | 11.9 | 466 |
|                |                                | 352    | 1,594  | ..     | 209   | 300   | 4,128  | 90    | 46  | 123   | 83  | 4,470  | 9,012   | 49.6 |     |
| STAFFORDSHIRE. |                                |        |        |        |       |       |        |       |     |       |     |        |         |      |     |
| 467            | Bradley Green .....            | 76     | 463    | 377    | 45    | 3     | 784    | 119   | 27  | 65    | 41  | 1,036  | 2,998   | 34.5 | 467 |
| 468            | Butt Lane .....                | 230    | 474    | 260    | 75    | 90    | 3,353  | 585   | 142 | 311   | 134 | 4,525  | 6,953   | 65.1 | 468 |
| 469            | Leek and Moorlands .....       | 504    | 1,125  | 142    | 259   | ..    | 2,077  | 29    | ..  | 1     | 42  | 2,149  | 7,861   | 27.3 | 469 |
| 470            | Stafford .....                 | 1,145  | 8,971  | 613    | 478   | 897   | 4,712  | 32    | ..  | ..    | 16  | 4,761  | 23,705  | 20.1 | 470 |
| 471            | Stone Perseverance .....       | 255    | 1,134  | 317    | 125   | 2     | 2,879  | 11    | 22  | 2     | 91  | 2,505  | 3,229   | 47.9 | 471 |
| 472            | Tipton—Owen Street .....       | 209    | 1,597  | ..     | 95    | ..    | 1,081  | 120   | ..  | ..    | 1   | 1,202  | 3,709   | 32.4 | 472 |
| 473            | Walsall .....                  | 39     | 29     | ..     | 5     | ..    | 427    | ..    | ..  | ..    | ..  | 428    | 500     | 85.6 | 473 |
| 474            | Wednesbury .....               | 50     | 49     | ..     | 1     | ..    | 50     | ..    | ..  | ..    | ..  | 50     | 44      | ..   | 474 |
| 475            | West Smethwick .....           | 1,041  | 3,921  | 3,092  | 515   | 381   | 6,091  | 567   | 27  | 278   | 130 | 7,093  | 16,255  | 43.6 | 475 |
| 476            | Wheaton Aston .....            | 87     | 986    | ..     | 27    | ..    | 1,113  | 11    | ..  | ..    | 1   | 125    | 840     | 14.7 | 476 |
| 477            | Wolverhampton .....            | 197    | 151    | ..     | ..    | ..    | 1,021  | ..    | ..  | ..    | 2   | 1,023  | 1,745   | 58.6 | 477 |
|                |                                | 3,833  | 17,700 | 4,801  | 1,565 | 873   | 22,088 | 1,474 | 219 | 658   | 458 | 24,897 | 69,848  | 35.7 |     |
| WARWICKSHIRE.  |                                |        |        |        |       |       |        |       |     |       |     |        |         |      |     |
| 478            | *Alderman's Green—No. 2. ....  | 253    | 576    | 2      | 175   | 2     | 482    | 31    | 6   | 3     | 1   | 523    | 3,284   | 16.0 | 478 |
| 479            | Birmingham Industrial .....    | 1,290  | 4,711  | ..     | 246   | 1     | 7,521  | ..    | ..  | 413   | 27  | 7,961  | 19,611  | 40.6 | 479 |
| 480            | " Midland .....                | 486    | 1,338  | ..     | 136   | ..    | 2,240  | ..    | ..  | 161   | ..  | 2,418  | 6,342   | 38.1 | 480 |
| 481            | Coventry .....                 | 885    | 7,440  | 580    | 455   | 91    | 4,255  | 522   | 5   | 397   | 37  | 6,216  | 15,539  | 33.5 | 481 |
| 482            | Foleshill—Lockhurst Lane ..... | 306    | 3,292  | 747    | 145   | 1,222 | 1,564  | 454   | 4   | 96    | 34  | 2,152  | 6,281   | 34.2 | 482 |
| 483            | *Prudent .....                 | 220    | 590    | ..     | ..    | ..    | 499    | 51    | ..  | ..    | ..  | 550    | 4,869   | 11.3 | 483 |
| 484            | *Kenilworth .....              | 337    | 3,418  | 257    | 155   | 284   | 1,814  | ..    | ..  | 73    | 18  | 1,905  | 6,055   | 81.4 | 484 |
| 485            | Leek Wootton .....             | 48     | 109    | ..     | ..    | ..    | 357    | ..    | ..  | ..    | ..  | 357    | 1,097   | 92.6 | 485 |
| 486            | Nuneaton .....                 | 256    | 747    | ..     | ..    | ..    | 1,056  | ..    | ..  | ..    | ..  | 1,152  | 7,577   | 15.2 | 486 |
| 487            | *Paradise Industrial .....     | 59     | 151    | ..     | 30    | 21    | 383    | ..    | ..  | ..    | 66  | 983    | 1,862   | 20.5 | 487 |
| 488            | Stoneleigh .....               | 109    | 307    | ..     | 35    | 46    | 243    | ..    | ..  | ..    | ..  | 243    | 8,490   | 7.0  | 488 |
| 489            | *Wolston .....                 | 45     | 110    | 50     | 25    | ..    | 15     | ..    | ..  | ..    | ..  | 15     | 560     | 2.7  | 489 |
|                |                                | 4,294  | 22,729 | 1,636  | 1,402 | 1,667 | 20,429 | 1,105 | 15  | 1,143 | 183 | 22,875 | 76,567  | 29.9 |     |
| WESTMORELAND.  |                                |        |        |        |       |       |        |       |     |       |     |        |         |      |     |
| 490            | Kendal .....                   | 1,402  | 8,528  | 81     | 670   | 1,282 | 9,074  | ..    | ..  | 1     | 20  | 9,095  | 28,221  | 32.2 | 490 |
| 491            | Kirkby Stephen .....           | 216    | 1,051  | 65     | 100   | 22    | 1,512  | 4     | ..  | 4     | 44  | 1,564  | 4,886   | 32.0 | 491 |





|     |                               |        |         |       |         |        |       |       |       |         |         |      |     |
|-----|-------------------------------|--------|---------|-------|---------|--------|-------|-------|-------|---------|---------|------|-----|
| 511 | Laxey—Industrial .....        | 330    | 2,963   | ..    | 1,431   | 39     | ..    | 29    | 78    | 1,577   | 10,516  | 15.0 | 511 |
| 512 | " " Old Equitable .....       | 140    | 1,615   | ..    | 794     | 17     | ..    | ..    | 12    | 823     | 6,100   | 13.4 | 512 |
|     | NEWCASTLE DISTRICT.           | 660    | 5,365   | ..    | 2,225   | 56     | ..    | 50    | 90    | 2,421   | 20,947  | 11.0 |     |
|     | CUMBERLAND.                   |        |         |       |         |        |       |       |       |         |         |      |     |
| 513 | Alston .....                  | 256    | 1,134   | ..    | 1,186   | 130    | 11    | 206   | 32    | 1,565   | 3,794   | 41.2 | 513 |
| 514 | Aspatria Agricultural .....   | 270    | 1,754   | 41    | 38      | ..     | ..    | ..    | ..    | 38      | 15,494  | ..2  | 514 |
| 515 | " Industrial .....            | 700    | 4,488   | 430   | 3,287   | 989    | 304   | 456   | 29    | 5,015   | 12,544  | 39.9 | 515 |
| 516 | Carlisle—South End .....      | 2,713  | 27,440  | 8,921 | 14,265  | 1,861  | 258   | 2,116 | 592   | 19,092  | 87,533  | 21.8 | 516 |
| 517 | Cleator Moor .....            | 3,592  | 50,471  | 245   | 4,054   | 1,840  | 27    | 331   | 34    | 6,886   | 109,734 | 6.3  | 517 |
| 518 | Dalston—Carlisle .....        | 244    | 1,767   | ..    | 1,699   | 252    | 84    | 80    | 23    | 2,088   | 5,182   | 40.3 | 518 |
| 519 | Egremont .....                | 810    | 7,909   | 151   | 7,222   | 145    | 108   | 100   | 4     | 1,079   | 17,528  | 6.1  | 519 |
| 520 | Harrington .....              | 168    | 841     | 960   | 1,172   | 197    | 47    | 154   | 49    | 1,619   | 5,636   | 22.2 | 520 |
| 521 | Houghton .....                | 92     | 517     | 10    | 517     | 8      | 1     | ..    | 53    | 579     | 2,534   | 29.2 | 521 |
| 522 | Longtown .....                | 314    | 2,050   | 493   | 1,519   | 340    | 8     | 188   | 60    | 2,115   | 7,559   | 27.9 | 522 |
| 523 | Maryport .....                | 1,300  | 13,098  | ..    | 10,812  | 2,699  | 460   | 1,104 | 329   | 15,404  | 36,935  | 41.9 | 523 |
| 524 | Naworth Colliery .....        | 686    | 2,745   | ..    | 2,717   | 351    | 92    | 274   | 72    | 3,516   | 18,943  | 18.5 | 524 |
| 525 | Nenthead .....                | 92     | 516     | ..    | 116     | ..     | ..    | 3     | ..    | 119     | 1,213   | 9.8  | 525 |
| 526 | Tindale .....                 | 85     | 4       | ..    | 58      | ..     | ..    | ..    | ..    | 58      | 5,008   | 1.1  | 526 |
| 527 | Upperby .....                 | 87     | 363     | ..    | 41      | ..     | ..    | ..    | ..    | 41      | 2,278   | 1.8  | 527 |
| 528 | *Warwick Bridge .....         | 122    | 917     | ..    | 55      | ..     | ..    | ..    | 4     | 59      | 5,010   | 1.1  | 528 |
| 529 | +Wigton .....                 | 285    | 943     | ..    | 17      | ..     | ..    | ..    | ..    | 17      | 5,924   | ..8  | 529 |
| 530 | Workington Bee Hive .....     | 144    | 437     | ..    | 897     | 81     | 1     | 133   | 24    | 1,136   | 2,510   | 45.2 | 530 |
| 531 | " and District .....          | 413    | 2,162   | 214   | 1,090   | 145    | 26    | 179   | 6     | 1,446   | 6,983   | 20.7 | 531 |
| 532 | Wyndham Row .....             | 67     | 228     | ..    | 591     | 22     | ..    | ..    | ..    | 613     | 2,005   | 30.5 | 532 |
|     | DURHAM.                       | 12,451 | 121,745 | 6,202 | 45,453  | 9,020  | 1,377 | 5,324 | 1,311 | 62,435  | 354,007 | 17.7 |     |
| 533 | Annfield Plain .....          | 1,994  | 18,859  | 188   | 12,560  | 3,112  | 348   | 1,880 | 549   | 18,399  | 69,191  | 26.6 | 533 |
| 534 | Bear Park .....               | 139    | 432     | ..    | 57      | 14     | 33    | ..    | 5     | 109     | 4,432   | 2.4  | 534 |
| 535 | Birtley .....                 | 1,476  | 11,668  | ..    | 2,027   | 318    | 220   | 183   | 131   | 2,858   | 57,212  | 4.9  | 535 |
| 536 | Bishop Auckland .....         | 6,808  | 47,051  | ..    | 17,256  | 7,825  | 190   | 3,651 | 831   | 29,252  | 200,931 | 14.5 | 536 |
| 537 | Blaydon-on-Tyne .....         | 4,356  | 75,192  | 800   | 36,584  | 6,833  | 500   | 2,170 | 792   | 46,898  | 165,770 | 28.3 | 537 |
| 538 | Boldon Colliery .....         | 789    | 6,158   | 331   | 1,861   | 1,547  | 204   | 164   | 237   | 4,013   | 30,091  | 13.3 | 538 |
| 539 | Brandon and Byswhittles ..... | 525    | 2,000   | 325   | 6,008   | 1,334  | 168   | 848   | 250   | 8,608   | 15,732  | 54.5 | 539 |
| 540 | Chester-le-Street .....       | 3,456  | 45,952  | 1,588 | 97,652  | 7,159  | 512   | 5,357 | 1,407 | 52,087  | 148,521 | 35.0 | 540 |
| 541 | Consett .....                 | 1,458  | 14,288  | ..    | 10,771  | 1,895  | 325   | 816   | 154   | 13,961  | 42,005  | 33.2 | 541 |
| 542 | Cornforth and Coxhoe .....    | 2,302  | 9,261   | 501   | 21,955  | 3,390  | 538   | 1,211 | 439   | 27,533  | 71,475  | 38.5 | 542 |
| 543 | Crook .....                   | 3,744  | 43,133  | ..    | 14,067  | 376    | 48    | 1,627 | 78    | 16,096  | 150,369 | 10.7 | 543 |
| 544 | Darlington .....              | 2,455  | 15,070  | ..    | 16,145  | 2,361  | 133   | 2,620 | 199   | 19,767  | 50,359  | 39.2 | 544 |
| 545 | Durham Equitable .....        | 2,779  | 32,439  | ..    | 22,600  | 3,844  | 1,119 | 2,855 | 671   | 31,089  | 75,750  | 41.0 | 545 |
| 546 | Easington Lane .....          | 426    | 3,909   | ..    | 123     | 7      | ..    | 278   | 32    | 551     | 16,103  | 3.4  | 546 |
| 547 | Esh .....                     | 720    | 5,000   | ..    | 28      | 18     | ..    | 386   | 22    | 443     | 23,220  | 1.9  | 547 |
| 548 | Felling .....                 | 715    | 3,867   | 23    | 10,227  | 1,255  | 865   | 472   | 184   | 12,803  | 22,605  | 56.6 | 548 |
| 549 | Gateshead .....               | 7,827  | 52,996  | ..    | 127,865 | 15,799 | 1,587 | 6,435 | 998   | 152,683 | 269,585 | 56.6 | 549 |
| 550 | Haswell Colliery .....        | 3,154  | 16,759  | ..    | 9,250   | 1,042  | 260   | 1,548 | 2     | 2,213   | 109,021 | 2.0  | 550 |
| 551 | Hetton Downs .....            | 1,305  | 9,491   | ..    | 4,467   | 1,032  | 49    | 991   | 274   | 7,033   | 40,624  | 17.3 | 551 |
| 552 | Jarrow-on-Tyne .....          | 1,830  | 8,714   | ..    | 9,217   | 629    | 49    | 1,009 | 23    | 10,926  | 40,720  | 26.8 | 552 |
| 553 | Leadgate .....                | 412    | 4,880   | ..    | 2,755   | 730    | 76    | 537   | 100   | 4,188   | 16,025  | 26.1 | 553 |







# CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the Co-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                     | No. of Members at end of Year. | Total Capital at end of Year. |        | Capital Invested with C. W. S. at end of Year. |       | Purchases from C. W. S. during the Year. |          |                |                  |                       | Total Sales during Year. | Per-centage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|---------------------------|--------------------------------|-------------------------------|--------|------------------------------------------------|-------|------------------------------------------|----------|----------------|------------------|-----------------------|--------------------------|------------------------------------------------------------|---------|
|         |                           |                                | Share.                        | Loan.  | Share.                                         | Loan. | Grocery & Provisions.                    | Drapery. | Woollen Cloth. | Boots and Shoes. | Furniture & Hardware. | Total.                   |                                                            |         |
| 624     | LONDON DISTRICT.          |                                |                               |        |                                                |       |                                          |          |                |                  |                       |                          |                                                            |         |
| 625     | BEDFORDSHIRE.             |                                |                               |        |                                                |       |                                          |          |                |                  |                       |                          |                                                            |         |
| 626     | Arlesey .....             | 166                            | £ 582                         | .. 25  | £ 65                                           | 55    | £ 1,099                                  | 121      | £ 18           | £ 54             | £ 30                  | £ 1,322                  | 2,635                                                      | 624     |
| 627     | Bedford .....             | 176                            | 331                           | .. 6   | .. 7                                           | ..    | 936                                      | 41       | 8              | 43               | 50                    | 1,078                    | 968                                                        | 625     |
| 628     | Eaton Socon .....         | 148                            | 445                           | .. 32  | ..                                             | ..    | 987                                      | 43       | 51             | 54               | 55                    | 1,190                    | 1,970                                                      | 626     |
| 629     | Harrold .....             | 81                             | 222                           | .. 18  | ..                                             | ..    | 86                                       | ..       | ..             | ..               | 6                     | 92                       | 1,008                                                      | 627     |
| 630     | Luton .....               | 93                             | 115                           | .. 65  | .. 22                                          | ..    | 362                                      | ..       | ..             | 2                | 8                     | 372                      | 639                                                        | 628     |
|         | Sharnbrook .....          | 45                             | 63                            | ..     | ..                                             | ..    | 26                                       | ..       | ..             | ..               | 7                     | 33                       | 226                                                        | 629     |
|         | Silsoe .....              | 186                            | 515                           | ..     | ..                                             | ..    | 731                                      | 146      | 48             | 65               | 49                    | 1,039                    | 1,596                                                      | 630     |
| 845     |                           |                                | 2,273                         | 57     | 247                                            | 81    | 4,227                                    | 351      | 125            | 218              | 205                   | 5,136                    | 9,062                                                      |         |
| 631     | BERKSHIRE.                |                                |                               |        |                                                |       |                                          |          |                |                  |                       |                          |                                                            |         |
| 632     | Aldermaston .....         | 51                             | 270                           | .. 82  | 25                                             | 66    | 495                                      | ..       | ..             | ..               | ..                    | 495                      | 1,774                                                      | 631     |
| 633     | Challow and Wantage ..... | 44                             | 133                           | .. 282 | 1                                              | ..    | 114                                      | ..       | ..             | ..               | ..                    | 114                      | 766                                                        | 632     |
| 634     | Reading .....             | 2,334                          | 16,869                        | ..     | 1,061                                          | ..    | 9,677                                    | 774      | 9              | 668              | 202                   | 11,330                   | 41,063                                                     | 633     |
|         | Yattendon .....           | 40                             | 322                           | ..     | ..                                             | ..    | 294                                      | ..       | ..             | ..               | ..                    | 294                      | 2,764                                                      | 634     |
| 2,469   |                           |                                | 17,593                        | 364    | 1,087                                          | 66    | 10,580                                   | 774      | 9              | 668              | 202                   | 12,233                   | 46,367                                                     |         |
| 635     | BUCKINGHAMSHIRE.          |                                |                               |        |                                                |       |                                          |          |                |                  |                       |                          |                                                            |         |
| 636     | Bletchley .....           | 261                            | 705                           | 515    | 58                                             | .. 13 | 2,230                                    | 9        | 8              | 1                | 145                   | 2,393                    | 4,698                                                      | 635     |
| 637     | Chesham .....             | 215                            | 556                           | ..     | 56                                             | ..    | 1,621                                    | 1        | ..             | ..               | 18                    | 1,640                    | 3,105                                                      | 636     |
| 638     | Claydon .....             | 44                             | 103                           | .. 38  | ..                                             | ..    | 64                                       | ..       | ..             | ..               | ..                    | 64                       | 929                                                        | 637     |
| 639     | Granboro' .....           | 23                             | 20                            | ..     | 1                                              | ..    | 170                                      | ..       | ..             | 4                | 20                    | 194                      | 280                                                        | 638     |
| 640     | Newport Pagnell .....     | 30                             | 98                            | ..     | 20                                             | ..    | 267                                      | ..       | ..             | ..               | 7                     | 274                      | 699                                                        | 639     |
| 641     | Ravenstone .....          | 77                             | 207                           | ..     | 11                                             | .. 22 | 118                                      | ..       | ..             | ..               | ..                    | 125                      | 1,053                                                      | 640     |
| 642     | Stony Stratford .....     | 126                            | 123                           | 706    | 55                                             | ..    | 912                                      | 361      | 12             | 96               | 47                    | 1,498                    | 2,827                                                      | 641     |
|         | Swanbourne .....          | 59                             | 156                           | ..     | ..                                             | ..    | 239                                      | ..       | ..             | ..               | ..                    | 239                      | 817                                                        | 642     |



| 643 | Wolverton .....             | 288   | 1,087  | 345   | 113   | 75    | 1,849  | 559   | 56  | 242 | 117 | 2,823  | 3,682   | 76-6 | 643 |
|-----|-----------------------------|-------|--------|-------|-------|-------|--------|-------|-----|-----|-----|--------|---------|------|-----|
|     |                             | 1,123 | 3,055  | 1,604 | 314   | 110   | 7,470  | 937   | 76  | 343 | 354 | 9,180  | 18,099  | 50-7 |     |
|     | CAMBRIDGESHIRE.             |       |        |       |       |       |        |       |     |     |     |        |         |      |     |
| 644 | Cambridge.....              | 1,007 | 5,672  | 783   | 450   | 294   | 8,579  | 719   | 97  | 591 | 271 | 10,257 | 19,259  | 53-2 | 644 |
| 645 | Sawston.....                | 392   | 3,238  | ..    | 185   | 122   | 2,588  | 162   | 1   | 165 | 21  | 2,987  | 7,487   | 39-2 | 645 |
| 646 | Westley .....               | 43    | 397    | 80    | 30    | 82    | 421    | ..    | ..  | 44  | 27  | 492    | 777     | 60-3 | 646 |
| 647 | Wisbech .....               | 34    | 75     | 1,138 | ..    | ..    | 548    | 32    | ..  | 6   | 5   | 591    | 2,074   | 28-5 | 647 |
|     | CORNWALL.                   |       |        |       |       |       |        |       |     |     |     |        |         |      |     |
| 648 | Falmouth.....               | 334   | 293    | 80    | ..    | ..    | 17     | ..    | ..  | ..  | ..  | 17     | 2,309   | 7    | 648 |
| 649 | Menheniot.....              | 116   | 198    | ..    | 1     | ..    | 161    | 37    | 8   | 41  | ..  | 247    | 1,677   | 14-7 | 649 |
| 650 | North Hill.....             | 80    | 398    | ..    | 3     | ..    | 3      | ..    | ..  | ..  | ..  | 3      | 1,056   | 3    | 650 |
| 651 | Par and St. Blazey .....    | 58    | 128    | ..    | ..    | ..    | 252    | ..    | ..  | 44  | ..  | 296    | 964     | 30-7 | 651 |
| 652 | Pensilva.....               | 128   | 665    | ..    | ..    | ..    | 193    | 26    | ..  | 4   | ..  | 223    | 2,282   | 9-8  | 652 |
| 653 | St. Cleer Industrial .....  | 314   | 964    | ..    | 23    | ..    | 1,139  | 21    | ..  | 134 | ..  | 1,264  | 3,064   | 32-6 | 653 |
| 654 | " R. T. Mutual .....        | 120   | 388    | ..    | ..    | ..    | 19     | ..    | ..  | 74  | ..  | 93     | 2,220   | 4-2  | 654 |
|     | DEVONSHIRE.                 |       |        |       |       |       |        |       |     |     |     |        |         |      |     |
| 655 | Barnstaple.....             | 220   | 711    | ..    | 27    | ..    | 1,784  | 84    | 8   | 297 | ..  | 2,173  | 14,472  | 15-0 | 655 |
| 656 | Bideford.....               | 222   | 716    | ..    | ..    | ..    | 232    | ..    | ..  | ..  | ..  | 232    | 1,750   | 13-2 | 656 |
| 657 | Buckfastleigh .....         | 392   | 3,023  | 104   | 174   | 63    | 436    | 360   | 132 | 213 | 89  | 483    | 8,433   | 14-0 | 657 |
| 658 | Exeter.....                 | 235   | 378    | ..    | 16    | ..    | 1,060  | ..    | ..  | 77  | 14  | 1,091  | 7,287   | 25-9 | 658 |
| 659 | *Newton Abbot.....          | 250   | 2,066  | 11    | 80    | ..    | 1,402  | 2     | 24  | 63  | 3   | 1,494  | 4,296   | 34-8 | 659 |
| 660 | North Tawton .....          | 47    | 47     | ..    | 2     | ..    | 150    | 6     | ..  | ..  | ..  | 156    | 410     | 38-0 | 660 |
| 661 | Plymouth .....              | 8,364 | 49,146 | ..    | 2,236 | 3,142 | 11,562 | 1,197 | 51  | 687 | 85  | 13,592 | 130,559 | 10-4 | 661 |
| 662 | Tiverton.....               | 103   | 246    | ..    | 8     | ..    | 873    | ..    | ..  | ..  | 6   | 879    | 1,513   | 58-1 | 662 |
|     | DORSETSHIRE.                |       |        |       |       |       |        |       |     |     |     |        |         |      |     |
| 663 | Childe Okeford.....         | 102   | 146    | ..    | 40    | ..    | 759    | 95    | ..  | 23  | 19  | 806    | 740     | 13-8 | 663 |
| 664 | Evershot.....               | 151   | 622    | ..    | ..    | ..    | 281    | ..    | ..  | ..  | ..  | 291    | 2,096   | 13-4 | 664 |
| 665 | +Milton Abbas .....         | 76    | 339    | ..    | ..    | ..    | 178    | 172   | 15  | 5   | 5   | 375    | 2,065   | 18-1 | 665 |
| 666 | Weymouth.....               | 286   | 2,893  | 575   | 106   | 18    | 2,033  | ..    | ..  | 40  | ..  | 2,073  | 7,645   | 27-1 | 666 |
|     | ESSEX.                      |       |        |       |       |       |        |       |     |     |     |        |         |      |     |
| 667 | Beckton.....                | 615   | 3,953  | 575   | 146   | 18    | 3,251  | 267   | 15  | 68  | 24  | 3,625  | 12,546  | 26-9 | 667 |
| 668 | Braintree .....             | 136   | 587    | ..    | 70    | 10    | 2,176  | 173   | 7   | 87  | 106 | 2,549  | 3,895   | 65-4 | 668 |
| 669 | Chelmsford .....            | 634   | 3,530  | 442   | 280   | 187   | 6,331  | 102   | 7   | 31  | 69  | 6,540  | 13,317  | 49-1 | 669 |
| 670 | Colchester.....             | 535   | 3,918  | ..    | 260   | 162   | 3,515  | 4     | ..  | 188 | 108 | 3,815  | 8,535   | 44-7 | 670 |
| 671 | Earls Colne .....           | 1,814 | 13,253 | 2,000 | 710   | ..    | 9,492  | 432   | 61  | 98  | 157 | 10,240 | 34,334  | 29-8 | 671 |
| 672 | Grays .....                 | 88    | 495    | 63    | 47    | ..    | 608    | 1     | ..  | 52  | 7   | 668    | 1,046   | 63-9 | 672 |
| 673 | Halstead.....               | 982   | 6,999  | 783   | 520   | 176   | 11,651 | 580   | 160 | 480 | 377 | 13,238 | 32,210  | 41-1 | 673 |
| 674 | Harwich and Dovercourt..... | 501   | 5,587  | 783   | 214   | 292   | 5,186  | 569   | 9   | 191 | 44  | 5,999  | 10,215  | 58-7 | 674 |
| 675 | Maldon and Heybridge.....   | 752   | 5,861  | 967   | 332   | 466   | 4,703  | 753   | 84  | 321 | 922 | 6,183  | 18,269  | 33-8 | 675 |
| 676 | Stratford.....              | 488   | 1,755  | 750   | 225   | 119   | 3,495  | 14    | 11  | 503 | 65  | 6,088  | 8,158   | 74-6 | 676 |
|     |                             | 3,803 | 40,060 | ..    | 1,705 | 558   | 13,371 | 36    | ..  | 382 | 846 | 14,635 | 103,370 | 14-1 | 676 |

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the Co-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                   | No. of Members at end of Year. | Total Capital at end of Year. |       | Capital Invested with C. W. S. at end of Year. |       | Purchases from C. W. S. during the Year. |         |                |                  |                       | Total Sales during Year. | Percentage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|-------------------------|--------------------------------|-------------------------------|-------|------------------------------------------------|-------|------------------------------------------|---------|----------------|------------------|-----------------------|--------------------------|-----------------------------------------------------------|---------|
|         |                         |                                | Share.                        | Loan. | Share.                                         | Loan. | Grocery & Provisions.                    | Drapery | Woollen Cloth. | Boots and Shoes. | Furniture & Hardware. |                          |                                                           |         |
| 677     | Essex—Con.              | 158                            | £ 960                         | £ 286 | £ 68                                           | £ 172 | £ 1,034                                  | £ 1     | £ 10           | £ 16             | £ 52                  | £ 2,557                  | 43·5                                                      | 677     |
| 678     | Terling                 | 136                            | 644                           | ..    | 75                                             | 6     | 610                                      | ..      | ..             | ..               | ..                    | 3,021                    | 20·1                                                      | 678     |
|         | *Tipree                 |                                |                               |       |                                                |       |                                          |         |                |                  |                       |                          |                                                           |         |
|         | GLAMORGANSHIRE.         | 10,027                         | 83,649                        | 5,494 | 4,506                                          | 2,148 | 64,172                                   | 2,665   | 339            | 2,319            | 2,133                 | 238,927                  | 29·9                                                      |         |
| 679     | Aberdare—Cardiff Street | 250                            | 2,334                         | ..    | 155                                            | 45    | 638                                      | 13      | 9              | 5                | ..                    | 6,091                    | 10·9                                                      | 679     |
| 680     | *Alltuen                | 230                            | 888                           | ..    | 4                                              | ..    | 297                                      | 37      | 3              | ..               | 2                     | 6,462                    | 5·2                                                       | 680     |
| 681     | Cardiff                 | 248                            | 954                           | ..    | 21                                             | ..    | 2,198                                    | 1       | ..             | 28               | ..                    | 4,096                    | 54·3                                                      | 681     |
| 682     | Cathays                 | 286                            | 551                           | ..    | 39                                             | ..    | 3,260                                    | 1       | ..             | 231              | ..                    | 5,385                    | 62·5                                                      | 682     |
| 683     | Clydach                 | 193                            | 1,119                         | 524   | ..                                             | ..    | 13                                       | ..      | ..             | ..               | ..                    | 8,069                    | 1                                                         | 683     |
| 684     | Cwmbach and Aberaman    | 1,455                          | 27,487                        | ..    | ..                                             | ..    | 4,148                                    | 33      | ..             | 11               | ..                    | 74,676                   | 5·6                                                       | 684     |
| 685     | Penrhiwceiber           | 160                            | 581                           | 145   | ..                                             | 1     | 190                                      | ..      | ..             | ..               | ..                    | 4,700                    | 2·5                                                       | 685     |
| 686     | Pontrhydyfen—G. T.      | 74                             | 455                           | 76    | 29                                             | ..    | 274                                      | 62      | ..             | ..               | 12                    | 2,404                    | 14·4                                                      | 686     |
| 687     | *Trecynon               | 210                            | 1,567                         | 300   | ..                                             | ..    | 80                                       | 16      | ..             | 10               | ..                    | 7,682                    | 1·3                                                       | 687     |
| 688     | Treorhy                 | 339                            | 3,491                         | 412   | ..                                             | ..    | 85                                       | 5       | ..             | ..               | 4                     | 13,945                   | 7                                                         | 688     |
| 689     | Ystalyfera              | 222                            | 858                           | 263   | ..                                             | 22    | 8                                        | ..      | ..             | ..               | ..                    | 2,384                    | 1·1                                                       | 689     |
| 690     | *Ystradfydwg            | 104                            | 882                           | 633   | ..                                             | ..    | 61                                       | ..      | ..             | ..               | ..                    | 4,278                    | 1·4                                                       | 690     |
|         |                         | 3,771                          | 40,567                        | 2,353 | 271                                            | 45    | 11,177                                   | 168     | 12             | 285              | 18                    | 140,972                  | 8·3                                                       |         |
| 691     | GLoucestershire.        |                                |                               |       |                                                |       |                                          |         |                |                  |                       |                          |                                                           |         |
| 691     | Bristol and District    | 160                            | 192                           | 4     | 18                                             | ..    | 997                                      | ..      | ..             | ..               | ..                    | 1,365                    | 73·0                                                      | 691     |
| 692     | *Cainscross and Ebbley  | 321                            | 5,785                         | 378   | 118                                            | 5     | 438                                      | ..      | ..             | 5                | 2                     | 5,975                    | 7·6                                                       | 692     |
| 693     | Cinderford              | 500                            | 3,918                         | ..    | 165                                            | ..    | 3,830                                    | 13      | ..             | 18               | 107                   | 13,752                   | 28·8                                                      | 693     |
| 694     | Colne St. Aldwyns       | 107                            | 879                           | ..    | 45                                             | 8     | 471                                      | 86      | 3              | ..               | 30                    | 2,049                    | 26·3                                                      | 694     |
| 695     | Down Ampney             | 53                             | 106                           | ..    | 35                                             | 16    | 358                                      | 64      | 15             | 20               | 2                     | 964                      | 47·6                                                      | 695     |
| 696     | Gloucester              | 5,186                          | 62,849                        | ..    | 5,235                                          | 2,407 | 23,169                                   | 2,797   | 64             | 1,092            | 309                   | 110,867                  | 24·7                                                      | 696     |
| 697     | Northleach              | 49                             | 300                           | ..    | 43                                             | ..    | 244                                      | ..      | ..             | ..               | ..                    | 1,008                    | 24·2                                                      | 697     |
| 698     | *Stroud                 | 496                            | 2,249                         | ..    | 53                                             | ..    | 1,616                                    | 4       | ..             | 186              | 163                   | 7,753                    | 25·4                                                      | 698     |



|                |                                   |        |         |       |       |       |         |       |       |       |       |         |         |     |     |
|----------------|-----------------------------------|--------|---------|-------|-------|-------|---------|-------|-------|-------|-------|---------|---------|-----|-----|
| 699            | Upper Lydbrook .....              | 58     | 294     | 83    | 17    | ..    | 776     | 33    | 1     | 1     | 1     | 812     | 2,115   | 384 | 699 |
| 700            | Welford, Stratford-on-Avon .....  | 10     | 100     | ..    | 10    | ..    | 168     | ..    | ..    | ..    | ..    | 108     | 466     | 360 | 700 |
| HAMPSHIRE.     |                                   |        |         |       |       |       |         |       |       |       |       |         |         |     |     |
| 701            | Grange .....                      | 30     | 164     | 4     | 20    | 8     | 251     | 2,947 | 83    | 5     | 1,322 | 614     | 146,314 | 253 | 701 |
| 702            | Portsea Island .....              | 1,746  | 9,240   | 749   | 900   | 416   | 19,085  | 2,144 | 169   | 1,184 | 891   | 256     | 33,300  | 705 | 702 |
| 703            | Shanklin Lake and Branstion ..... | 167    | 975     | ..    | 55    | 17    | 1,492   | 6     | 15    | 128   | 58    | 1,699   | 4,440   | 383 | 703 |
| HERFORDSHIRE.  |                                   |        |         |       |       |       |         |       |       |       |       |         |         |     |     |
| 704            | Hampton Charles .....             | 1,883  | 10,379  | 753   | 975   | 441   | 20,828  | 2,150 | 184   | 1,317 | 949   | 25,428  | 38,486  | 660 | 704 |
| HERTFORDSHIRE. |                                   |        |         |       |       |       |         |       |       |       |       |         |         |     |     |
| 705            | Berkhamstead .....                | 202    | 1,109   | ..    | 57    | ..    | 1,114   | 161   | 49    | 141   | 112   | 1,577   | 3,855   | 408 | 705 |
| 706            | Hertford .....                    | 76     | 134     | ..    | 13    | ..    | 618     | 6     | ..    | 42    | 5     | 671     | 888     | 800 | 706 |
| 707            | Hoddesdon .....                   | 67     | 442     | 115   | 35    | 113   | 963     | 2     | ..    | 93    | 14    | 1,075   | 1,657   | 649 | 707 |
| 708            | Radlett .....                     | 48     | 185     | ..    | 15    | 8     | 613     | 59    | 3     | 57    | 57    | 789     | 1,325   | 595 | 708 |
| 709            | St. Albans .....                  | 120    | 172     | ..    | 12    | ..    | 311     | 5     | 17    | 28    | 3     | 364     | 1,344   | 270 | 709 |
| 710            | Tring .....                       | 674    | 8,474   | 79    | 230   | 57    | 2,708   | 721   | 84    | 332   | 135   | 3,980   | 11,209  | 355 | 710 |
| 711            | Watford .....                     | 152    | 462     | 195   | 66    | ..    | 662     | 115   | 15    | 49    | 26    | 897     | 3,271   | 265 | 711 |
| KENT.          |                                   |        |         |       |       |       |         |       |       |       |       |         |         |     |     |
| 712            | Bromley .....                     | 1,339  | 10,978  | 389   | 488   | 173   | 6,989   | 1,069 | 171   | 742   | 352   | 9,323   | 23,499  | 397 | 712 |
| 713            | Chislehurst .....                 | 423    | 1,046   | ..    | 171   | ..    | 5,097   | 29    | 12    | 172   | 66    | 5,376   | 8,364   | 643 | 713 |
| 714            | Faversham .....                   | 49     | 120     | ..    | 18    | ..    | 626     | 10    | ..    | 108   | 33    | 777     | 888     | 875 | 714 |
| 715            | Folkestone .....                  | 931    | 13,392  | ..    | 425   | 333   | 5,936   | 477   | 258   | 899   | 373   | 7,443   | 31,189  | 238 | 715 |
| 716            | Gravesend .....                   | 927    | 3,843   | 100   | ..    | ..    | 3,717   | 429   | 66    | 250   | 202   | 4,664   | 19,670  | 237 | 716 |
| 717            | Green Street .....                | 497    | 2,640   | ..    | 177   | ..    | 8,287   | 1,170 | 185   | 356   | 274   | 10,272  | 13,800  | 744 | 717 |
| 718            | Lewisham .....                    | 265    | 2,348   | 454   | 120   | 171   | 2,203   | 195   | 39    | 131   | 100   | 2,668   | 5,986   | 446 | 718 |
| 719            | London—New Cross .....            | 185    | 192     | 52    | 15    | ..    | 1,110   | 12    | 15    | 43    | 33    | 1,213   | 1,938   | 626 | 719 |
| 720            | New Brompton—Economical .....     | 199    | 230     | ..    | 16    | ..    | 1,226   | 1     | ..    | 25    | 21    | 1,273   | 2,029   | 627 | 720 |
| 721            | Penge .....                       | 405    | 1,887   | 123   | 172   | 25    | 3,477   | 187   | 63    | 219   | 120   | 4,066   | 8,106   | 501 | 721 |
| 722            | River and District .....          | 360    | 1,052   | 20    | 125   | 4     | 4,140   | 465   | 64    | 242   | 185   | 5,096   | 8,004   | 636 | 722 |
| 723            | Rochester .....                   | 1,034  | 3,296   | 986   | 75    | 2     | 2,356   | 91    | 40    | 54    | 152   | 2,693   | 5,842   | 461 | 723 |
| 724            | St. Mary Cray .....               | 294    | 2,267   | 1,580 | 303   | ..    | 11,327  | 173   | 91    | 710   | 417   | 12,718  | 20,295  | 626 | 724 |
| 725            | Sheerness Economical .....        | 878    | 9,362   | 104   | 100   | 36    | 3,164   | 925   | 235   | 427   | 252   | 4,403   | 8,234   | 535 | 725 |
| 726            | High Street .....                 | 1,511  | 19,060  | 50    | 29    | ..    | 122     | ..    | ..    | ..    | ..    | 122     | 22,857  | 05  | 726 |
| 727            | Sittingbourne .....               | 696    | 5,588   | 1,856 | 710   | 1,918 | 18,975  | 786   | 14    | 1,071 | 624   | 20,870  | 52,587  | 397 | 727 |
| 728            | West Greenwich .....              | 465    | 1,108   | 130   | 150   | 8     | 6,876   | 365   | 26    | 352   | 100   | 7,719   | 19,720  | 393 | 728 |
| 729            | Woolwich—Royal Arsenal .....      | 4,480  | 36,774  | 486   | 4,489 | ..    | 20,925  | 2,781 | 2     | 873   | 636   | 25,217  | 84,492  | 298 | 729 |
| MIDDLESEX.     |                                   |        |         |       |       |       |         |       |       |       |       |         |         |     |     |
| 730            | Childs Hill and Cricklewood ..... | 14,002 | 107,191 | 5,030 | 7,445 | 2,729 | 101,788 | 7,527 | 1,163 | 5,580 | 3,708 | 119,766 | 320,604 | 373 | 730 |
| 731            | *Dalston—London .....             | 187    | 463     | 41    | 25    | ..    | 1,912   | 29    | 22    | 173   | 129   | 2,265   | 2,997   | 756 | 731 |
| 732            | Enfield Highway .....             | 123    | 144     | ..    | 21    | ..    | 469     | ..    | ..    | 10    | 5     | 484     | 1,225   | 395 | 732 |
| 733            | Hampton and New Hampton .....     | 267    | 1,297   | 101   | 113   | 88    | 3,253   | 293   | ..    | 151   | 116   | 3,822   | 5,709   | 669 | 733 |
|                |                                   | 73     | 315     | 47    | 40    | 47    | 1,281   | 18    | 12    | 108   | 67    | 1,486   | 2,730   | 544 | 733 |

# CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the CO-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.                             | No. of Members at end of Year. | Total Capital at end of Year. |       | Capital Invested with C.W.S. at end of Year. |       | Purchases from C. W. S. during the Year. |          |                |                  |                        | Total Sales during Year. | Percentage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|-----------------------------------|--------------------------------|-------------------------------|-------|----------------------------------------------|-------|------------------------------------------|----------|----------------|------------------|------------------------|--------------------------|-----------------------------------------------------------|---------|
|         |                                   |                                | Share.                        | Loan. | Share.                                       | Loan. | Grocery & Provisions.                    | Drapery. | Woollen Cloth. | Books and Shoes. | Furniture & Hard-ware. |                          |                                                           |         |
| 734     | MIDDLESEX—Con.                    | 206                            | £ 1,293                       | 73    | £ 90                                         | 60    | £ 2,203                                  | £ 7      | £ 1            | £ 116            | £ 56                   | £ 3,806                  | 62·6                                                      | 784     |
| 735     | Hendon .....                      | 118                            | 8                             | ..    | 50                                           | 15    | 1,143                                    | 214      | 176            | 91               | 386                    | 2,010                    | 97·9                                                      | 785     |
| 736     | London—Anchor .....               | 134                            | 64                            | ..    | 6                                            | ..    | 610                                      | 32       | 27             | 15               | 66                     | 750                      | ..                                                        | 786     |
| 737     | " Borough of Hackney ..           | 540                            | 1,861                         | ..    | 188                                          | ..    | 5,983                                    | 59       | 23             | 238              | 107                    | 6,410                    | 61·3                                                      | 737     |
| 738     | " Chelsea .....                   | 18                             | 8                             | ..    | 10                                           | ..    | 1,192                                    | 87       | 29             | 33               | 177                    | 1,518                    | 99·4                                                      | 738     |
| 739     | " Cottage .....                   | 158                            | 218                           | ..    | ..                                           | ..    | 173                                      | 1        | ..             | ..               | ..                     | 174                      | 6·5                                                       | 739     |
| 740     | " East .....                      | 243                            | 400                           | ..    | 100                                          | 22    | 1,887                                    | 8        | ..             | 67               | 55                     | 2,017                    | 67·4                                                      | 740     |
| 741     | " Finsbury .....                  | 258                            | 615                           | 265   | 100                                          | 10    | 1,909                                    | 284      | 118            | 371              | 143                    | 2,825                    | 47·9                                                      | 741     |
| 742     | " Hammersmith .....               | 280                            | 433                           | ..    | 48                                           | ..    | 1,034                                    | 5        | 29             | ..               | 12                     | 1,080                    | 66·4                                                      | 742     |
| 743     | " Irish Industrial .....          | 394                            | 724                           | 80    | 68                                           | ..    | 3,301                                    | 393      | 128            | 270              | 197                    | 4,219                    | 65·6                                                      | 743     |
| 744     | " Kensington & Notting Hill ..... | 146                            | 226                           | 25    | 77                                           | ..    | 748                                      | 4        | 12             | 33               | 11                     | 808                      | 55·8                                                      | 744     |
| 745     | " Marylebone .....                | 514                            | 1,463                         | 673   | 241                                          | ..    | 2,637                                    | ..       | ..             | 137              | 76                     | 2,850                    | 16·0                                                      | 745     |
| 746     | " Railway Clearing House ..       | 32                             | 21                            | 4     | 3                                            | ..    | 183                                      | ..       | ..             | ..               | ..                     | 183                      | 56·8                                                      | 746     |
| 747     | " South Hackney .....             | 413                            | 619                           | 36    | 78                                           | ..    | 2,497                                    | 25       | 81             | 95               | 198                    | 4,890                    | 65·9                                                      | 747     |
| 748     | " Tower Hamlets .....             | 83                             | 158                           | 14    | 35                                           | ..    | 357                                      | ..       | ..             | 38               | ..                     | 395                      | 63·3                                                      | 748     |
| 749     | " Westbourne Park .....           | 317                            | 595                           | 112   | 111                                          | ..    | 2,596                                    | 250      | 101            | 102              | 115                    | 3,164                    | 59·0                                                      | 749     |
| 750     | Staines and Egham .....           | 98                             | 86                            | ..    | ..                                           | ..    | 232                                      | 6        | 11             | 12               | 9                      | 330                      | 37·0                                                      | 750     |
| 751     | Tottenham .....                   | 103                            | 327                           | ..    | 19                                           | ..    | 896                                      | 59       | 14             | 101              | 37                     | 1,107                    | 71·1                                                      | 751     |
|         | Willesden Junction Railway ..     | 4,705                          | 10,888                        | 1,424 | 1,423                                        | 242   | 85,556                                   | 1,704    | 793            | 2,161            | 1,962                  | 43,176                   | 52·0                                                      |         |
| 752     | MONMOUTHSHIRE.                    | 380                            | 2,870                         | 700   | 52                                           | 119   | 2,364                                    | 165      | ..             | 14               | 11                     | 2,554                    | 17·6                                                      | 752     |
| 753     | Blaina .....                      | 78                             | 178                           | ..    | ..                                           | ..    | 120                                      | ..       | ..             | ..               | ..                     | 120                      | 8·1                                                       | 753     |
| 754     | Griffiths Town .....              | 780                            | 8,743                         | 545   | 360                                          | 18    | 5,060                                    | 96       | 9              | 208              | 23                     | 20,924                   | 25·8                                                      | 754     |
| 755     | Newport .....                     | 7                              | 7                             | ..    | 5                                            | 9     | 112                                      | ..       | ..             | ..               | ..                     | 120                      | 98·3                                                      | 755     |
|         | Raglan .....                      | 1,245                          | 11,798                        | 1,245 | 417                                          | 146   | 7,856                                    | 361      | 9              | 232              | 24                     | 37,046                   | 22·0                                                      |         |



|                   |                                 |       |        |       |       |       |        |       |     |       |     |      |        |         |      |     |       |      |     |
|-------------------|---------------------------------|-------|--------|-------|-------|-------|--------|-------|-----|-------|-----|------|--------|---------|------|-----|-------|------|-----|
| NORFOLK.          |                                 |       |        |       |       |       |        |       |     |       |     |      |        |         |      |     |       |      |     |
| 756               | Colkirk .....                   | 43    | 154    | 106   | 5     | ..    | 518    | ..    | 1   | ..    | ..  | 299  | 10     | 194     | 290  | 518 | 1,195 | 49.3 | 756 |
| 757               | +Docking .....                  | 100   | 443    | ..    | 50    | 27    | 692    | ..    | 282 | 10    | 157 | 277  | 695    | 1,251   | 55.5 | 757 |       |      | 757 |
| 758               | Norwich .....                   | 1,086 | 3,495  | 418   | 360   | 6     | 5,785  | ..    | 2   | ..    | 97  | 11   | 6,511  | 17,458  | 37.8 | 758 |       |      | 758 |
| 759               | Thetford .....                  | 727   | 2,540  | 387   | 315   | 57    | 2,465  | ..    | 16  | ..    | ..  | ..   | 2,529  | 16,172  | 15.6 | 759 |       |      | 759 |
|                   |                                 | 1,956 | 6,632  | 911   | 730   | 90    | 9,460  | 299   | ..  | 10    | 194 | 290  | 10,253 | 36,076  | 28.4 |     |       |      |     |
| NORTHAMPTONSHIRE. |                                 |       |        |       |       |       |        |       |     |       |     |      |        |         |      |     |       |      |     |
| 760               | Bozeat .....                    | 166   | 531    | ..    | 65    | 1     | 987    | 110   | ..  | ..    | 13  | 81   | 1,141  | 5,072   | 22.5 | 760 |       |      | 760 |
| 761               | +Braefield Green .....          | 185   | 287    | 23    | 100   | 268   | 398    | ..    | 23  | ..    | ..  | 8    | 406    | 472     | 86.0 | 761 |       |      | 761 |
| 762               | Broughton and Cransley .....    | 100   | 520    | ..    | 66    | ..    | 499    | ..    | ..  | ..    | ..  | 7    | 529    | 1,848   | 28.6 | 762 |       |      | 762 |
| 763               | +Clipstone .....                | 28    | 70     | ..    | ..    | ..    | 172    | ..    | ..  | ..    | ..  | ..   | 172    | 649     | 26.5 | 763 |       |      | 763 |
| 764               | Daventry .....                  | 432   | 2,406  | ..    | 190   | 8     | 1,822  | ..    | ..  | ..    | 1   | 10   | 1,833  | 8,334   | 22.0 | 764 |       |      | 764 |
| 765               | Denton .....                    | 56    | 117    | 70    | 1     | ..    | 91     | ..    | ..  | ..    | ..  | ..   | 91     | 886     | 10.3 | 765 |       |      | 765 |
| 766               | Desborough .....                | 319   | 1,831  | 862   | 150   | 132   | 2,568  | 149   | ..  | 20    | ..  | 14   | 2,751  | 8,875   | 31.0 | 766 |       |      | 766 |
| 767               | Earls Barton .....              | 410   | 3,616  | ..    | 200   | 206   | 1,666  | 359   | 10  | ..    | 2   | 47   | 2,084  | 8,268   | 25.2 | 767 |       |      | 767 |
| 768               | *Ecton .....                    | 60    | 132    | ..    | 35    | ..    | 20     | ..    | ..  | ..    | ..  | 4    | 24     | 715     | 9.3  | 768 |       |      | 768 |
| 769               | Finedon .....                   | 359   | 3,353  | ..    | 170   | 199   | 2,379  | 361   | 23  | ..    | 22  | 35   | 2,820  | 11,734  | 24.0 | 769 |       |      | 769 |
| 770               | Gayton .....                    | 44    | 75     | ..    | 2     | ..    | 183    | ..    | ..  | ..    | ..  | ..   | 183    | 413     | 44.3 | 770 |       |      | 770 |
| 771               | Great Worth .....               | 39    | 223    | ..    | ..    | ..    | 221    | ..    | ..  | ..    | ..  | ..   | 221    | 1,279   | 17.3 | 771 |       |      | 771 |
| 772               | Hackleton .....                 | 111   | 697    | ..    | ..    | ..    | 107    | ..    | 22  | ..    | ..  | ..   | 139    | 1,846   | 7.0  | 772 |       |      | 772 |
| 773               | Harpole .....                   | 673   | 4,686  | 2,802 | 132   | ..    | 3,641  | 738   | 81  | ..    | 190 | 165  | 4,815  | 16,529  | 29.1 | 773 |       |      | 773 |
| 774               | Hazel Beach .....               | 55    | 79     | 137   | ..    | ..    | 63     | ..    | ..  | 7     | ..  | ..   | 63     | 1,217   | 5.2  | 774 |       |      | 774 |
| 775               | Irchester .....                 | 180   | 1,638  | ..    | 13    | ..    | 1,087  | 158   | ..  | ..    | 11  | 11   | 1,274  | 5,589   | 23.0 | 775 |       |      | 775 |
| 776               | Irthingborough .....            | 31    | 48     | ..    | 1     | ..    | 170    | ..    | ..  | ..    | ..  | ..   | 170    | 507     | 33.5 | 776 |       |      | 776 |
| 777               | Kettering .....                 | 1,780 | 13,185 | ..    | 880   | 310   | 8,984  | 327   | ..  | 5     | ..  | 80   | 9,396  | 34,549  | 27.2 | 777 |       |      | 777 |
| 778               | Long Buckley .....              | 388   | 2,769  | ..    | 190   | 26    | 1,950  | ..    | ..  | ..    | ..  | 60   | 2,010  | 10,476  | 19.2 | 778 |       |      | 778 |
| 779               | +Lower Heyford .....            | 68    | 224    | ..    | 10    | ..    | 417    | ..    | ..  | ..    | ..  | ..   | 417    | 1,702   | 24.5 | 779 |       |      | 779 |
| 780               | Moulton .....                   | 103   | 960    | ..    | ..    | ..    | 67     | ..    | ..  | ..    | ..  | ..   | 67     | 2,127   | 3.1  | 780 |       |      | 780 |
| 781               | Northampton—West End .....      | 887   | 1,616  | 487   | 195   | ..    | 2,549  | ..    | ..  | ..    | ..  | 8    | 2,552  | 10,538  | 24.2 | 781 |       |      | 781 |
| 782               | Oundle .....                    | 98    | 286    | 83    | 50    | 34    | 607    | 25    | ..  | ..    | ..  | ..   | 632    | 2,134   | 29.0 | 782 |       |      | 782 |
| 783               | Peterborough .....              | 1,410 | 6,273  | ..    | 510   | 271   | 6,744  | 944   | 13  | ..    | 552 | 221  | 8,474  | 24,076  | 35.2 | 783 |       |      | 783 |
| 784               | *Potter's Pury .....            | 21    | 45     | 15    | 15    | 17    | 182    | ..    | ..  | ..    | 1   | ..   | 183    | 256     | 71.5 | 784 |       |      | 784 |
| 785               | Rothwell .....                  | 388   | 3,411  | 501   | 190   | 133   | 1,634  | 111   | 6   | ..    | 39  | 10   | 1,800  | 6,808   | 26.4 | 785 |       |      | 785 |
| 786               | Rushden .....                   | 248   | 1,022  | ..    | 36    | ..    | 418    | 71    | ..  | ..    | ..  | ..   | 489    | 3,787   | 12.9 | 786 |       |      | 786 |
| 787               | Wellingborough—Industrial ..... | 312   | 368    | 532   | 2     | ..    | 504    | ..    | ..  | ..    | ..  | ..   | 504    | 6,534   | 7.7  | 787 |       |      | 787 |
| 788               | Midland .....                   | 335   | 2,179  | ..    | 145   | 67    | 1,805  | 389   | 4   | ..    | 116 | 100  | 2,414  | 7,849   | 30.7 | 788 |       |      | 788 |
| 789               | West Haddon .....               | 110   | 310    | ..    | 50    | ..    | 293    | ..    | ..  | ..    | ..  | ..   | 293    | 1,887   | 15.5 | 789 |       |      | 789 |
| 790               | Wollaston .....                 | 210   | 1,492  | 17    | 80    | 49    | 1,635  | 178   | ..  | 38    | 65  | 124  | 2,040  | 5,057   | 40.3 | 790 |       |      | 790 |
| 791               | Yardley Hastings .....          | 169   | 574    | ..    | 33    | ..    | 781    | 65    | ..  | 13    | 16  | 8    | 888    | 3,270   | 27.0 | 791 |       |      | 791 |
|                   |                                 | 9,775 | 55,003 | 5,519 | 3,511 | 1,781 | 44,644 | 4,008 | 242 | 1,028 | 938 | 26.0 | 50,860 | 195,283 | ..   |     |       |      |     |
| OXFORDSHIRE.      |                                 |       |        |       |       |       |        |       |     |       |     |      |        |         |      |     |       |      |     |
| 792               | Banbury .....                   | 1,281 | 12,687 | 6,639 | 610   | 10    | 5,086  | 645   | 39  | 461   | 263 | 14.9 | 6,444  | 43,088  | ..   | 792 |       |      | 792 |
| 793               | Chipping Norton .....           | 763   | 7,807  | 1,580 | 370   | 119   | 3,418  | 218   | 57  | 194   | 62  | 24.6 | 3,949  | 16,012  | ..   | 793 |       |      | 793 |
| 794               | Middleton Stoney .....          | 83    | 543    | 100   | 28    | ..    | 609    | 8     | ..  | 44    | 43  | 28.7 | 699    | 2,436   | ..   | 794 |       |      | 794 |
| 795               | Oxford Industrial .....         | 1,326 | 8,960  | 1,388 | 700   | 9     | 9,121  | 338   | 13  | 511   | 40  | 41.1 | 10,043 | 24,394  | ..   | 795 |       |      | 795 |

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of 849 SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the Co-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number. | NAME.            | No. of Members at end of Year. | Total Capital at end of Year. |       | Capital Invested with C. W. S. at end of Year. |       | Purchases from C. W. S. during the Year. |          |                |                  |                        |        | Total Sales during Year. | Per-centage of Purchases from C. W. S. on the Total Sales. | Number. |
|---------|------------------|--------------------------------|-------------------------------|-------|------------------------------------------------|-------|------------------------------------------|----------|----------------|------------------|------------------------|--------|--------------------------|------------------------------------------------------------|---------|
|         |                  |                                | Share.                        | Loan. | Share.                                         | Loan. | Grocery & Provisions.                    | Drapery. | Woollen Cloth. | Books and Shoes. | Furniture & Hard-ware. | Total. |                          |                                                            |         |
| 796     | OXFORDSHIRE—Con. | 26                             | £ 156                         | £ ..  | £ 30                                           | £ 9   | £ 83                                     | £ 3      | £ ..           | £ ..             | £ ..                   | £ 86   | £ 235                    | 36.6                                                       | 796     |
| 797     |                  | 124                            | 1,350                         | ..    | 70                                             | 1     | 711                                      | 54       | ..             | 60               | 12                     | 889    | 2,806                    | 29.9                                                       | 797     |
| 798     | SOMERSETSHIRE.   | 3,603                          | 31,503                        | 9,707 | 1,808                                          | 148   | 18,978                                   | 1,281    | 111            | 1,270            | 420                    | 22,060 | 88,971                   | 24.8                                                       | 798     |
| 799     |                  | 200                            | 503                           | 1,362 | 39                                             | ..    | 1,286                                    | ..       | ..             | 33               | ..                     | 1,319  | 3,586                    | 36.8                                                       | 799     |
| 800     |                  | 142                            | 816                           | ..    | 60                                             | 8     | 709                                      | 293      | 11             | 68               | 51                     | 1,132  | 1,928                    | 58.7                                                       | 800     |
| 801     |                  | 982                            | 4,686                         | ..    | ..                                             | ..    | 172                                      | 1        | ..             | ..               | 5                      | 1,178  | 11,517                   | 1.5                                                        | 801     |
| 802     |                  | 183                            | 1,095                         | ..    | ..                                             | ..    | 314                                      | 83       | ..             | 5                | 21                     | 423    | 4,430                    | 9.5                                                        | 802     |
| 803     |                  | 51                             | 1,100                         | 95    | ..                                             | ..    | 197                                      | ..       | ..             | ..               | 11                     | 208    | 3,400                    | 6.1                                                        | 803     |
| 804     |                  | 520                            | 2,911                         | ..    | 156                                            | ..    | 2,320                                    | 161      | ..             | 13               | 24                     | 2,518  | 8,853                    | 28.4                                                       | 804     |
| 805     |                  | 398                            | 1,986                         | ..    | ..                                             | ..    | 898                                      | 37       | ..             | ..               | 9                      | 444    | 6,308                    | 7.0                                                        | 805     |
|         |                  | 395                            | 2,192                         | ..    | ..                                             | ..    | 1,223                                    | 194      | ..             | ..               | 72                     | 1,498  | 8,346                    | 17.9                                                       | 805     |
|         |                  | 2,871                          | 15,189                        | 1,457 | 255                                            | 8     | 6,619                                    | 769      | 20             | 119              | 193                    | 7,720  | 48,368                   | 15.9                                                       | 806     |
| 806     | SUFFOLK.         | 74                             | 401                           | ..    | 5                                              | ..    | 202                                      | ..       | ..             | ..               | ..                     | 202    | 1,785                    | 11.3                                                       | 806     |
| 807     |                  | 312                            | 967                           | ..    | 155                                            | 2     | 2,603                                    | 333      | 15             | 356              | 65                     | 3,372  | 5,946                    | 56.7                                                       | 807     |
| 808     |                  | 75                             | 423                           | ..    | ..                                             | ..    | 392                                      | 9        | ..             | 4                | 42                     | 347    | 2,403                    | 14.4                                                       | 808     |
| 809     |                  | 187                            | 829                           | 320   | 4                                              | ..    | 395                                      | ..       | ..             | ..               | ..                     | 395    | 2,379                    | 16.6                                                       | 809     |
| 810     |                  | 50                             | 340                           | ..    | 33                                             | ..    | 272                                      | 27       | ..             | 24               | 8                      | 331    | 877                      | 97.7                                                       | 810     |
| 811     |                  | 23                             | 327                           | ..    | ..                                             | ..    | 116                                      | ..       | ..             | ..               | ..                     | 116    | 1,862                    | 8.5                                                        | 811     |
| 812     |                  | 968                            | 821                           | 600   | 143                                            | ..    | 2,752                                    | 16       | 7              | 184              | 16                     | 2,975  | 6,324                    | 47.0                                                       | 812     |
| 813     |                  | 2,389                          | 16,661                        | 2,280 | 1,040                                          | 620   | 15,448                                   | 1,081    | 47             | 25               | 883                    | 17,484 | 50,963                   | 34.3                                                       | 813     |
| 814     |                  | 273                            | 5,470                         | ..    | 125                                            | 841   | 1,101                                    | 157      | ..             | 24               | 16                     | 1,298  | 3,672                    | 85.3                                                       | 814     |
| 815     |                  | 228                            | 1,139                         | 200   | 90                                             | 39    | 1,263                                    | 45       | ..             | 103              | 18                     | 1,429  | 4,099                    | 34.8                                                       | 815     |
|         |                  | 3,979                          | 25,378                        | 3,380 | 1,595                                          | 1,502 | 24,444                                   | 1,668    | 69             | 720              | 1,048                  | 27,949 | 79,810                   | 35.0                                                       | 815     |



|     |                                    |       |        |       |       |       |        |       |        |       |       |        |        |        |        |      |     |
|-----|------------------------------------|-------|--------|-------|-------|-------|--------|-------|--------|-------|-------|--------|--------|--------|--------|------|-----|
| 816 | Addington.....                     | 26    | 104    | ..    | ..    | 80    | ..     | 52    | 109    | 1     | ..    | 7      | 3      | 120    | 646    | 185  | 816 |
| 817 | Balham .....                       | 185   | 1,065  | ..    | 202   | 120   | 152    | 40    | 3,231  | 206   | 84    | 211    | 82     | 1,951  | 3,801  | 513  | 817 |
| 818 | Caulham .....                      | 247   | 1,560  | ..    | 152   | 500   | 693    | 693   | 10,898 | 242   | 13    | 334    | 150    | 3,882  | 5,449  | 71-2 | 818 |
| 819 | London—Battersea .....             | 1,098 | 8,555  | ..    | 2,203 | 331   | ..     | ..    | 5,075  | 525   | 33    | 194    | 245    | 11,537 | 23,954 | 481  | 819 |
| 820 | " " Bermundsey .....               | 688   | 1,299  | ..    | ..    | 145   | 243    | 159   | 1,290  | 8     | 18    | 66     | 70     | 6,072  | 10,663 | 56-9 | 820 |
| 821 | " " Brixton Result.....            | 200   | 1,235  | ..    | 469   | 345   | ..     | ..    | 4,012  | 89    | 5     | 216    | 147    | 1,382  | 5,015  | 27-5 | 821 |
| 822 | " " Railway Industrial .....       | 669   | 3,768  | ..    | ..    | 135   | 14     | ..    | 330    | ..    | ..    | ..     | 14     | 4,419  | 8,245  | 53-6 | 822 |
| 823 | " " South General .....            | 134   | 165    | ..    | ..    | 11    | ..     | ..    | 3,172  | 153   | 40    | 194    | 117    | 3,676  | 6,004  | 61-2 | 823 |
| 824 | " " South-East.....                | 154   | 144    | ..    | ..    | 121   | ..     | 68    | 991    | 1     | ..    | ..     | 98     | 950    | 1,314  | 72-3 | 824 |
| 825 | Reigate .....                      | 241   | 1,185  | ..    | 483   | 50    | ..     | ..    | 2,415  | 109   | 24    | 113    | 57     | 2,718  | 5,418  | 50-2 | 825 |
| 826 | Surbiton.....                      | 100   | 169    | ..    | 17    | ..    | ..     | 27    | 965    | 67    | 17    | 180    | 21     | 1,250  | 1,676  | 74-5 | 826 |
| 827 |                                    | 4,236 | 19,908 | 3,526 | 1,888 | 1,296 | 34,058 | 1,356 | 244    | 1,589 | 1,054 | 72,502 | 38,301 | 52-8   |        |      | 827 |
| 828 | Arundel .....                      | 290   | 2,079  | 169   | 120   | 8     | 1,794  | 21    | 1,794  | 21    | 92    | 156    | 55     | 2,058  | 7,412  | 27-7 | 828 |
| 829 | Horsham .....                      | 589   | 5,669  | 315   | 190   | ..    | 1,898  | 30    | 1,898  | 30    | ..    | 35     | 103    | 2,066  | 10,009 | 20-6 | 829 |
| 830 | Leves .....                        | 330   | 1,988  | 40    | 155   | 12    | 1,868  | 175   | 1,868  | 175   | 6     | 115    | 36     | 2,200  | 3,663  | 60-0 | 830 |
| 831 | Newhaven .....                     | 56    | 36     | ..    | ..    | ..    | 251    | ..    | 251    | ..    | 4     | ..     | 1      | 256    | 325    | 78-7 | 831 |
| 832 | Worthing .....                     | 280   | 1,515  | 18    | 67    | ..    | 1,916  | ..    | 1,916  | ..    | ..    | 17     | 3      | 1,936  | 3,891  | 49-7 | 832 |
| 833 | Alcester .....                     | 1,545 | 11,287 | 562   | 532   | 20    | 7,727  | 226   | 7,727  | 226   | 42    | 323    | 198    | 8,516  | 25,300 | 20-6 | 833 |
| 834 | +Biddford .....                    | 603   | 4,432  | 75    | 270   | 10    | 4,368  | 210   | 4,368  | 210   | ..    | 654    | 75     | 5,307  | 13,156 | 40-3 | 834 |
| 835 | Cubington .....                    | 205   | 1,183  | 931   | 90    | 21    | 700    | ..    | 700    | ..    | 23    | ..     | 12     | 735    | 4,818  | 15-2 | 835 |
| 836 | Emscote .....                      | 109   | 185    | ..    | 25    | ..    | 3-2    | ..    | 3-2    | ..    | ..    | ..     | 8      | 365    | 2,844  | 15-5 | 836 |
| 837 | Harbury .....                      | 800   | 1,987  | 1,035 | 4     | ..    | 477    | ..    | 477    | ..    | ..    | ..     | 10     | 487    | 6,127  | 7-9  | 837 |
| 838 | Long Itchington.....               | 739   | 6,404  | ..    | 270   | 217   | 3,413  | 605   | 3,413  | 605   | 18    | 577    | 88     | 4,701  | 16,610 | 28-3 | 838 |
| 839 | Napton .....                       | 110   | 442    | ..    | ..    | ..    | 286    | ..    | 286    | ..    | ..    | ..     | 5      | 291    | 1,940  | 15-0 | 839 |
| 840 | Rugby .....                        | 75    | 284    | ..    | 4     | ..    | 338    | 36    | 338    | 36    | ..    | 7      | 11     | 392    | 1,374  | 28-5 | 840 |
| 841 | +Snitterfield .....                | 1,464 | 18,257 | ..    | 655   | 2,273 | 11,941 | 1,681 | 11,941 | 1,681 | 373   | 1,591  | 477    | 16,063 | 37,356 | 42-3 | 841 |
| 842 | Southam .....                      | 115   | 605    | ..    | 65    | 28    | 215    | ..    | 215    | ..    | ..    | ..     | ..     | 215    | 1,499  | 14-3 | 842 |
| 843 | Stratford-on-Avon .....            | 182   | 825    | ..    | 29    | ..    | 638    | ..    | 638    | ..    | ..    | ..     | ..     | 688    | 2,894  | 23-8 | 843 |
|     |                                    | 158   | 409    | 160   | 11    | ..    | 925    | 2     | 925    | 2     | ..    | 1      | 1      | 929    | 3,040  | 30-5 |     |
|     |                                    | 4,560 | 35,013 | 1,601 | 1,423 | 2,549 | 23,703 | 2,544 | 23,703 | 2,544 | 414   | 2,880  | 682    | 30,173 | 91,758 | 32-8 |     |
| 844 | Bradford-on-Avon .....             | 204   | 1,290  | ..    | 4     | ..    | 463    | 6     | 463    | 6     | ..    | 73     | 81     | 572    | 3,334  | 17-1 | 844 |
| 845 | Ebbesbourne Wake .....             | 57    | 231    | ..    | 13    | 2     | 283    | 21    | 283    | 21    | 1     | 40     | 8      | 353    | 1,201  | 29-4 | 845 |
| 846 | +Lydiard Millicent .....           | 47    | 100    | ..    | 11    | ..    | 25     | ..    | 25     | ..    | ..    | ..     | ..     | 25     | 511    | 4-9  | 846 |
| 847 | New Swindon .....                  | 280   | 1,683  | 404   | 135   | 63    | 2,011  | 625   | 2,011  | 625   | 10    | 142    | 116    | 2,904  | 4,653  | 62-4 | 847 |
| 848 | Wilton (late Sidney Herbert) ..... | 218   | 2,440  | ..    | 110   | 1     | 1,192  | 129   | 1,192  | 129   | 15    | 51     | 10     | 1,397  | 3,995  | 34-9 | 848 |
|     |                                    | 806   | 5,744  | 415   | 274   | 66    | 3,974  | 781   | 3,974  | 781   | 26    | 305    | 165    | 5,251  | 13,694 | 38-3 |     |
| 849 | Worcester .....                    | 734   | 3,499  | 1,700 | 153   | 9     | 2,127  | 45    | 2,127  | 45    | 5     | 248    | 40     | 2,465  | 11,856 | 20-8 | 849 |
|     |                                    | 734   | 3,499  | 1,700 | 153   | 9     | 2,127  | 45    | 2,127  | 45    | 5     | 248    | 40     | 2,465  | 11,856 | 20-8 |     |

## SURREY.

## SUSSEX.

## WARWICKSHIRE.

## WILTSHIRE.

## WORCESTERSHIRE.

## CO-OPERATIVE SOCIETIES AND THE "WHOLESALE."

COMPARATIVE STATEMENT showing NUMBER of MEMBERS, SHARE and LOAN CAPITAL, and SALES of the SOCIETIES, together with the amount of SHARE and LOAN CAPITAL INVESTED IN, and PURCHASES FROM, the Co-OPERATIVE WHOLESALE SOCIETY, for the year 1886.—Continued.

| Number.              | NAME.                 | No. of Members at end of Year. | Total Capital at end of Year. |         | Capital Invested with C. W. S. at end of Year. |         | Purchases from C. W. S. during the Year. |          |                |                  |                         | Total Sales during Year. | Per-centage of Pur-chases from C. W. S. on the Total Sales. | Number. |        |
|----------------------|-----------------------|--------------------------------|-------------------------------|---------|------------------------------------------------|---------|------------------------------------------|----------|----------------|------------------|-------------------------|--------------------------|-------------------------------------------------------------|---------|--------|
|                      |                       |                                | Share.                        | Loan.   | Share.                                         | Loan.   | Grocery & Pro-visions.                   | Drapery. | Woollen Cloth. | Boots and Shoes. | Furni-ture & Hard-ware. |                          |                                                             |         | Total. |
| MANCHESTER DISTRICT. |                       |                                |                               |         |                                                |         |                                          |          |                |                  |                         |                          |                                                             |         |        |
| 1                    | Lancashire .....      | 200,762                        | 2,809,352                     | 263,087 | 82,882                                         | 220,923 | £ 1,213,815                              | £ 79,127 | £ 7,970        | £ 50,129         | £ 28,524                | £ 1,379,565              | £ 5,141,307                                                 | 26.8    | 1      |
| 2                    | Yorkshire .....       | 161,818                        | 1,971,361                     | 71,158  | 62,945                                         | 132,876 | 839,653                                  | 67,908   | 4,530          | 38,038           | 15,797                  | 965,926                  | 4,119,388                                                   | 23.4    | 2      |
| 3                    | Carnarvonshire .....  | 127                            | 117                           | ..      | 33                                             | ..      | 629                                      | ..       | ..             | ..               | 33                      | 662                      | 2,508                                                       | 29.6    | 3      |
| 4                    | Cheshire .....        | 20,532                         | 216,074                       | 52,598  | 11,752                                         | 36,646  | 143,640                                  | 12,670   | 1,876          | 6,302            | 4,664                   | 169,082                  | 570,427                                                     | 29.6    | 4      |
| 5                    | Cumberland .....      | 1,153                          | 14,187                        | 1,745   | 547                                            | 1,643   | 5,130                                    | 734      | 70             | 840              | 273                     | 7,037                    | 27,685                                                      | 25.4    | 5      |
| 6                    | Denbighshire .....    | 236                            | 761                           | 100     | 117                                            | 9       | 1,188                                    | 18       | 8              | 17               | 120                     | 1,346                    | 2,151                                                       | 62.6    | 6      |
| 7                    | Derbyshire .....      | 18,999                         | 226,503                       | 15,488  | 8,581                                          | 15,803  | 124,915                                  | 10,305   | 2,037          | 6,748            | 3,837                   | 147,842                  | 438,355                                                     | 33.7    | 7      |
| 8                    | Leicestershire .....  | 12,151                         | 113,564                       | 21,287  | 4,657                                          | 1,825   | 32,080                                   | 3,889    | 886            | 3,876            | 779                     | 41,460                   | 235,137                                                     | 17.6    | 8      |
| 9                    | Lincolnshire .....    | 9,040                          | 63,489                        | 23,373  | 3,365                                          | 270     | 47,979                                   | 5,793    | 1,702          | 3,637            | 862                     | 59,979                   | 200,117                                                     | 29.9    | 9      |
| 10                   | Merionethshire .....  | 1,303                          | 5,465                         | 882     | 412                                            | ..      | 2,980                                    | 347      | 176            | 754              | 64                      | 4,321                    | 18,230                                                      | 23.7    | 10     |
| 11                   | Montgomeryshire ..... | 359                            | 2,596                         | ..      | 185                                            | 90      | 1,988                                    | 83       | 21             | 164              | 31                      | 2,290                    | 4,400                                                       | 50.2    | 11     |
| 12                   | Nottinghamshire ..... | 12,715                         | 66,126                        | 10,087  | 3,867                                          | 1,385   | 39,543                                   | 8,118    | 408            | 3,043            | 921                     | 47,033                   | 172,018                                                     | 27.4    | 12     |
| 13                   | Shropshire .....      | 352                            | 1,594                         | ..      | 209                                            | 300     | 4,128                                    | 90       | 46             | 123              | 83                      | 4,470                    | 9,012                                                       | 49.6    | 13     |
| 14                   | Staffordshire .....   | 3,833                          | 17,700                        | 4,801   | 1,565                                          | 873     | 22,083                                   | 1,474    | 219            | 658              | 458                     | 24,897                   | 69,848                                                      | 35.7    | 14     |
| 15                   | Warwickshire .....    | 4,294                          | 22,729                        | 1,636   | 1,402                                          | 1,667   | 20,429                                   | 1,105    | 15             | 1,143            | 183                     | 22,875                   | 76,567                                                      | 29.9    | 15     |
| 16                   | Westmoreland .....    | 2,219                          | 13,592                        | 320     | 841                                            | 1,305   | 13,432                                   | 56       | ..             | 5                | 80                      | 13,573                   | 50,126                                                      | 27.7    | 16     |
| 17                   | Worcestershire .....  | 4,551                          | 33,440                        | 3,056   | 1,545                                          | 1,521   | 15,898                                   | 1,096    | 377            | 317              | 43                      | 17,731                   | 87,377                                                      | 20.3    | 17     |
| 18                   | Ireland .....         | 810                            | 2,483                         | 246     | 57                                             | ..      | 901                                      | 58       | ..             | 2                | 7                       | 968                      | 33,079                                                      | 29.9    | 18     |
| 19                   | Isle of Man .....     | 660                            | 5,365                         | ..      | 103                                            | ..      | 2,225                                    | 56       | ..             | 50               | 90                      | 2,421                    | 20,947                                                      | 11.0    | 19     |
|                      |                       | 455,944                        | 5,586,448                     | 469,864 | 185,065                                        | 437,136 | 2,532,641                                | 187,871  | 20,271         | 115,846          | 56,849                  | 2,913,478                | 11,278,639                                                  | 25.8    |        |
| NEWCASTLE DISTRICT.  |                       |                                |                               |         |                                                |         |                                          |          |                |                  |                         |                          |                                                             |         |        |
| 20                   | Cumberland .....      | 12,451                         | 121,745                       | 6,292   | 3,659                                          | 2,580   | 45,453                                   | 9,020    | 1,377          | 5,324            | 1,311                   | 62,485                   | 354,007                                                     | 17.7    | 20     |
| 21                   | Durham .....          | 68,561                         | 575,989                       | 15,142  | 24,546                                         | 51,330  | 510,663                                  | 83,788   | 11,403         | 48,663           | 11,616                  | 665,633                  | 2,193,931                                                   | 30.3    | 21     |
| 22                   | Northumberland .....  | 27,181                         | 234,119                       | 28,692  | 12,594                                         | 13,840  | 349,709                                  | 41,062   | 6,633          | 19,733           | 8,606                   | 425,743                  | 946,205                                                     | 44.9    | 22     |
| 23                   | Yorkshire .....       | 5,719                          | 26,243                        | 2,327   | 2,472                                          | 675     | 35,113                                   | 2,677    | 457            | 2,022            | 333                     | 40,602                   | 139,973                                                     | 59.0    | 23     |
|                      |                       | 113,912                        | 948,096                       | 52,453  | 43,271                                         | 68,425  | 940,938                                  | 136,047  | 19,870         | 75,742           | 21,866                  | 1,194,463                | 3,634,116                                                   | 32.8    |        |



## LONDON DISTRICT.

|    |                        |        |         |        |        |        |         |        |       |        |        |         |           |      |    |
|----|------------------------|--------|---------|--------|--------|--------|---------|--------|-------|--------|--------|---------|-----------|------|----|
| 24 | Bedfordshire.....      | 845    | 2,273   | 57     | 247    | 84     | 4,237   | 351    | 125   | 218    | 205    | 5,126   | 9,062     | 56.5 | 24 |
| 25 | Berkshire .....        | 2,469  | 17,593  | 364    | 1,087  | 66     | 10,580  | 774    | 9     | 688    | 202    | 12,233  | 46,307    | 26.6 | 25 |
| 26 | Buckinghamshire .....  | 1,123  | 3,055   | 1,604  | 314    | 110    | 7,470   | 987    | 76    | 638    | 354    | 9,180   | 18,099    | 50.7 | 26 |
| 27 | Cambridgeshire .....   | 1,476  | 9,382   | 1,971  | 665    | 498    | 12,136  | 913    | 98    | 806    | 924    | 14,277  | 29,587    | 48.2 | 27 |
| 28 | Cornwall.....          | 1,150  | 2,964   | 80     | 27     | ..     | 1,784   | 84     | 8     | 297    | ..     | 2,173   | 14,472    | 15.0 | 28 |
| 29 | Devonshire .....       | 10,333 | 56,333  | 115    | 2,516  | 3,205  | 16,715  | 1,508  | 207   | 1,055  | 272    | 19,817  | 151,488   | 13.8 | 29 |
| 30 | Dorsetshire .....      | 615    | 3,953   | 575    | 146    | 18     | 3,251   | 267    | 15    | 68     | 24     | 8,625   | 12,546    | 28.9 | 30 |
| 31 | Essex .....            | 10,027 | 83,649  | 5,494  | 4,506  | 2,148  | 64,172  | 2,665  | 339   | 2,349  | 2,153  | 71,678  | 238,927   | 29.9 | 31 |
| 32 | Glamorganshire .....   | 3,771  | 40,567  | 2,353  | 271    | 45     | 11,177  | 168    | 12    | 285    | 18     | 11,660  | 140,372   | 8.3  | 32 |
| 33 | Gloucestershire .....  | 6,940  | 76,172  | 465    | 5,739  | 2,468  | 32,067  | 2,947  | 83    | 1,322  | 614    | 37,033  | 146,314   | 25.3 | 33 |
| 34 | Hampshire .....        | 1,883  | 10,379  | 753    | 975    | 441    | 20,828  | 2,150  | 184   | 1,317  | 949    | 25,438  | 98,486    | 66.0 | 34 |
| 35 | Hertfordshire .....    | 58     | 174     | 87     | 13     | ..     | 420     | ..     | ..    | 6      | ..     | 426     | 1,637     | 26.0 | 35 |
| 36 | Hertfordshire .....    | 1,339  | 10,978  | 389    | 488    | 173    | 6,989   | 1,069  | 171   | 742    | 852    | 9,393   | 28,499    | 39.7 | 36 |
| 37 | Kent.....              | 14,002 | 107,191 | 5,030  | 7,445  | 2,329  | 101,788 | 7,527  | 1,163 | 5,580  | 3,708  | 119,766 | 320,604   | 37.3 | 37 |
| 38 | Middlesex .....        | 4,705  | 10,888  | 1,424  | 1,423  | 242    | 96,556  | 1,704  | 793   | 2,221  | 1,962  | 43,176  | 83,012    | 52.0 | 38 |
| 39 | Monmouthshire .....    | 1,245  | 11,798  | 1,245  | 417    | 146    | 7,656   | 261    | 9     | 222    | 34     | 8,132   | 37,046    | 22.0 | 39 |
| 40 | Norfolk .....          | 1,956  | 6,632   | 911    | 730    | 90     | 9,460   | 299    | 10    | 194    | 290    | 10,233  | 36,076    | 28.4 | 40 |
| 41 | Northamptonshire ..... | 9,775  | 55,003  | 5,519  | 3,511  | 1,781  | 44,644  | 4,008  | 242   | 1,028  | 938    | 50,860  | 195,283   | 26.0 | 41 |
| 42 | Oxfordshire .....      | 3,603  | 31,503  | 9,707  | 1,808  | 148    | 18,978  | 1,281  | 111   | 1,270  | 420    | 22,060  | 88,971    | 24.8 | 42 |
| 43 | Somersetshire .....    | 2,871  | 15,189  | 1,457  | 255    | 8      | 6,619   | 769    | 20    | 119    | 193    | 7,720   | 48,368    | 15.9 | 43 |
| 44 | Suffolk.....           | 3,979  | 25,378  | 3,880  | 1,595  | 1,502  | 24,444  | 1,668  | 69    | 730    | 1,048  | 27,949  | 79,810    | 35.0 | 44 |
| 45 | Surrey.....            | 4,236  | 19,908  | 3,526  | 1,838  | 1,296  | 34,058  | 1,356  | 244   | 1,583  | 1,054  | 38,301  | 72,502    | 52.8 | 45 |
| 46 | Sussex.....            | 1,545  | 11,287  | 562    | 532    | 20     | 7,737   | 926    | 42    | 823    | 198    | 8,516   | 25,300    | 20.6 | 46 |
| 47 | Warwickshire .....     | 4,560  | 35,013  | 1,601  | 1,423  | 2,549  | 28,703  | 2,544  | 414   | 2,830  | 682    | 30,173  | 91,758    | 32.8 | 47 |
| 48 | Wiltshire .....        | 806    | 5,744   | 415    | 274    | 66     | 3,974   | 781    | 26    | 305    | 165    | 5,251   | 13,694    | 38.3 | 48 |
| 49 | Worcestershire .....   | 734    | 3,499   | 1,700  | 153    | 9      | 2,127   | 45     | 5     | 248    | 40     | 2,465   | 11,856    | 20.8 | 49 |
|    |                        | 96,046 | 656,455 | 50,784 | 38,398 | 19,842 | 513,550 | 36,862 | 4,475 | 26,065 | 16,199 | 596,651 | 1,975,146 | 30.2 |    |

## DISTRICT SUMMARY OF TOTALS.

|                  |         |           |         |         |         |           |         |        |         |        |           |            |      |
|------------------|---------|-----------|---------|---------|---------|-----------|---------|--------|---------|--------|-----------|------------|------|
| Manchester ..... | 455,944 | 5,586,448 | 469,864 | 185,065 | 437,136 | 2,532,641 | 187,871 | 20,271 | 115,846 | 56,849 | 2,913,478 | 11,278,629 | 25.8 |
| Newcastle .....  | 113,912 | 948,096   | 52,453  | 43,271  | 63,425  | 940,998   | 186,047 | 19,870 | 75,742  | 21,866 | 1,194,463 | 3,634,116  | 32.8 |
| London .....     | 96,046  | 656,455   | 50,784  | 38,398  | 19,842  | 513,550   | 36,862  | 4,475  | 26,065  | 16,199 | 596,651   | 1,975,146  | 30.2 |
|                  | 655,902 | 7,190,999 | 573,101 | 266,734 | 525,403 | 3,987,129 | 360,280 | 44,616 | 217,653 | 94,914 | 4,704,592 | 16,887,891 | 27.8 |

## MERCHANDISE MARKS ACT, 1887.

[50 &amp; 51 VICT., CH. 28.]

## ARRANGEMENT OF SECTIONS.

## Section.

1. Short title.
2. Offences as to trade marks and trade descriptions.
3. Definitions.
4. Forging trade mark.
5. Applying marks and descriptions.
6. Exemption of certain persons employed in ordinary course of business.
7. Application of Act to watches.
8. Mark on watch case.
9. Trade mark, how described in pleading.
10. Rules as to evidence.
11. Punishment of accessories.
12. Search warrant.
13. Extension of 22 & 23 Vict., c. 17, to offences under this Act.
14. Costs of defence or prosecution.
15. Limitation of prosecution.
16. Prohibition on importation.
17. Implied warranty on sale of marked goods.
18. Provisions of Act as to false description not to apply in certain cases.
19. Savings.
20. False representation as to Royal Warrant.
21. Application of Act to Scotland.
22. Application of Act to Ireland.
23. Repeal of 25 & 26 Vict., c. 88.



## MERCHANDISE MARKS ACT, 1887.

## CHAPTER 28.

AN ACT TO CONSOLIDATE AND AMEND THE LAW RELATING TO FRAUDULENT MARKS  
ON MERCHANDISE.

**B**E it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. This Act may be cited as the Merchandise Marks Act, 1887.

2.—(1.) Every person who—

- (a) forges any trade mark ; or
- (b) falsely applies to goods any trade mark or any mark so nearly resembling a trade mark as to be calculated to deceive ; or
- (c) makes any die, block, machine, or other instrument for the purpose of forging, or of being used for forging, a trade mark ; or
- (d) applies any false trade description to goods ; or
- (e) disposes of or has in his possession any die, block, machine, or other instrument for the purpose of forging a trade mark ; or

(f) causes any of the things above in this section mentioned to be done, shall, subject to the provisions of this Act, and unless he proves that he acted without intent to defraud, be guilty of an offence against this Act.

(2.) Every person who sells, or exposes for, or has in his possession for, sale, or any purpose of trade or manufacture, any goods or things to which any forged trade mark or false trade description is applied, or to which any trade mark or mark so nearly resembling a trade mark as to be calculated to deceive is falsely applied, as the case may be, shall, unless he proves—

(a.) That having taken all reasonable precautions against committing an offence against this Act, he had at the time of the commission of the alleged offence no reason to suspect the genuineness of the trade mark, mark, or trade description ; and

(b.) That on demand made by or on behalf of the prosecutor, he gave all the information in his power with respect to the persons from whom he obtained such goods or things ; or

(c.) That otherwise he had acted innocently ;  
be guilty of an offence against this Act.

## MERCHANDISE MARKS ACT, 1887.

(3.) Every person guilty of an offence against this Act shall be liable—

- (i.) on conviction on indictment, to imprisonment, with or without hard labour, for a term not exceeding two years, or to fine, or to both imprisonment and fine; and
- (ii.) on summary conviction to imprisonment, with or without hard labour, for a term not exceeding four months, or to a fine not exceeding twenty pounds, and in the case of a second or subsequent conviction to imprisonment, with or without hard labour, for a term not exceeding six months, or to a fine not exceeding fifty pounds; and
- (iii.) in any case, to forfeit to Her Majesty every chattel, article, instrument, or thing by means of or in relation to which the offence has been committed.

(4.) The court before whom any person is convicted under this section may order any forfeited articles to be destroyed or otherwise disposed of as the court thinks fit.

(5.) If any person feels aggrieved by any conviction made by a court of summary jurisdiction, he may appeal therefrom to a court of quarter sessions.

(6.) Any offence for which a person is under this Act liable to punishment on summary conviction may be prosecuted, and any articles liable to be forfeited under this Act by a court of summary jurisdiction may be forfeited in manner provided by the Summary Jurisdiction Acts: Provided that a person charged with an offence under this section before a court of summary jurisdiction shall, on appearing before the court, and before the charge is gone into, be informed of his right to be tried on indictment, and if he requires be so tried accordingly.

3.—(1.) For the purposes of this Act—

The expression “trade mark” means a trade mark registered in the register of trade marks kept under the Patents, Designs, and Trade Marks Act, 1883, and includes any trade mark which, either with or without registration, is protected by law in any British possession or foreign State to which the provisions of the one hundred and third section of the Patents, Designs, and Trade Marks Act, 1883, are, under Order in Council, for the time being applicable:

The expression “trade description” means any description, statement, or other indication, direct or indirect,

- (a.) as to the number, quantity, measure, gauge, or weight of any goods, or
- (b.) as to the place or country in which any goods were made or produced, or
- (c.) as to the mode of manufacturing or producing any goods, or
- (d.) as to the material of which any goods are composed, or
- (e.) as to any goods being the subject of an existing patent, privilege, or copyright,

and the use of any figure, word, or mark which, according to the custom of the trade, is commonly taken to be an indication of any of the above matters, shall be deemed to be a trade description within the meaning of this Act:



## MERCHANDISE MARKS ACT, 1887.

The expression "false trade description" means a trade description which is false in a material respect as regards the goods to which it is applied, and includes every alteration of a trade description, whether by way of addition, effacement, or otherwise, where that alteration makes the description false in a material respect, and the fact that a trade description is a trade mark, or part of a trade mark, shall not prevent such trade description being a false trade description within the meaning of this Act :

The expression "goods" means anything which is the subject of trade, manufacture, or merchandise :

The expressions "person," "manufacturer, dealer, or trader," and "proprietor" include any body of persons corporate or unincorporate :

The expression "name" includes any abbreviation of a name.

(2.) The provisions of this Act respecting the application of a false trade description to goods shall extend to the application of goods of any such figures, words, or marks, or arrangement or combination thereof, whether including a trade mark or not, as are reasonably calculated to lead persons to believe that the goods are the manufacture or merchandise of some person other than the person whose manufacture or merchandise they really are.

(3.) The provisions of this Act respecting the application of a false trade description to goods, or respecting goods to which a false trade description is applied, shall extend to the application to goods of any false name or initials of a person, and to goods with the false name or initials of a person applied, in like manner as if such name or initials were a trade description, and for the purpose of this enactment the expression false name or initials means as applied to any goods, any name or initials of a person which—

- (a.) are not a trade mark, or part of a trade mark, and
- (b.) are identical with, or a colourable imitation of the name or initials of a person carrying on business in connection with goods of the same description, and not having authorised the use of such name or initials, and
- (c.) are either those of a fictitious person or of some person not *bonâ fide* carrying on business in connection with such goods.

4.—A person shall be deemed to forge a trade mark who either—

- (a.) without the assent of the proprietor of the trade mark makes that trade mark or a mark so nearly resembling that trade mark as to be calculated to deceive ; or
- (b.) falsifies any genuine trade mark, whether by alteration, addition, effacement, or otherwise ;

and any trade mark or mark so made or falsified is in this Act referred to as a forged trade mark.

Provided that in any prosecution for forging a trade mark the burden of proving the assent of the proprietor shall lie on the defendant.

## MERCHANDISE MARKS ACT, 1887.

5.—(1.) A person shall be deemed to apply a trade mark or mark or trade description to goods who—

- (a.) applies it to the goods themselves ; or
- (b.) applies it to any covering, label, reel, or other thing in or with which the goods are sold or exposed or had in possession for any purpose of sale, trade, or manufacture ; or
- (c.) places, encloses, or annexes any goods which are sold or exposed or had in possession for any purpose of sale, trade, or manufacture, in, with, or to any covering, label, reel, or other thing to which a trade mark or trade description has been applied ; or
- (d.) uses a trade mark or mark or trade description in any manner calculated to lead to the belief that the goods in connection with which it is used are designated or described by that trade mark or mark or trade description.

(2.) The expression “covering” includes any stopper, cask, bottle, vessel, box, cover, capsule, case, frame, or wrapper ; and the expression “label” includes any band or ticket.

A trade mark, or mark, or trade description, shall be deemed to be applied whether it is woven, impressed, or otherwise worked into, or annexed, or affixed to the goods, or to any covering, label, reel, or other thing.

(3.) A person shall be deemed to falsely apply to goods a trade mark or mark, who without the assent of the proprietor of a trade mark applies such trade mark, or a mark so nearly resembling it as to be calculated to deceive, but in any prosecution for falsely applying a trade mark or mark to goods the burden of proving the assent of the proprietor shall lie on the defendant.

6. Where a defendant is charged with making any die, block, machine, or other instrument for the purpose of forging, or being used for forging, a trade mark, or with falsely applying to goods any trade mark or any mark so nearly resembling a trade mark as to be calculated to deceive, or with applying to goods any false trade description, or causing any of the things in this section mentioned to be done, and proves—

- (a.) That in the ordinary course of his business he is employed, on behalf of other persons, to make dies, blocks, machines, or other instruments for making, or being used in making, trade marks, or as the case may be, to apply marks or descriptions to goods, and that in the case which is the subject of the charge he was so employed by some person resident in the United Kingdom, and was not interested in the goods by way of profit or commission dependent on the sale of such goods ; and
- (b.) That he took reasonable precautions against committing the offence charged ; and
- (c.) That he had, at the time of the commission of the alleged offence, no reason to suspect the genuineness of the trade mark, mark, or trade description ; and



## MERCHANDISE MARKS ACT, 1887.

(d.) That he gave to the prosecutor all the information in his power with respect to the persons on whose behalf the trade mark, mark, or description was applied—

he shall be discharged from the prosecution, but shall be liable to pay the costs incurred by the prosecutor, unless he has given due notice to him that he will rely on the above defence.

7. Where a watch case has thereon any words or marks which constitute, or are by common repute considered as constituting, a description of the country in which the watch was made, and the watch bears no description of the country where it was made, those words or marks shall *primâ facie* be deemed to be a description of that country within the meaning of this Act, and the provisions of this Act with respect to goods to which a false trade description has been applied, and with respect to selling or exposing for or having in possession for sale, or any purpose of trade or manufacture, goods with a false trade description, shall apply accordingly, and for the purposes of this section the expression "watch" means all that portion of a watch which is not the watch case.

8.—(1.) Every person who after the date fixed by Order in Council sends or brings a watch case, whether imported or not, to any assay office in the United Kingdom for the purpose of being assayed, stamped, or marked, shall make a declaration declaring in what country or place the case was made. If it appears by such declaration that the watch case was made in some country or place out of the United Kingdom, the assay office shall place on the case such a mark (differing from the mark placed by the office on a watch case made in the United Kingdom), and in such a mode as may be from time to time directed by Order in Council.

(2.) The declaration may be made before an officer of an assay office, appointed in that behalf by the office (which officer is hereby authorised to administer such a declaration), or before a justice of the peace, or a commissioner having power to administer oaths in the Supreme Court of Judicature in England or Ireland, or in the Court of Session in Scotland, and shall be in such form as may be from time to time directed by Order in Council.

(3.) Every person who makes a false declaration for the purposes of this section shall be liable, on conviction on indictment, to the penalties of perjury, and on summary conviction to a fine not exceeding twenty pounds for each offence.

9. In any indictment, pleading, proceeding, or document, in which any trade mark or forged trade mark is intended to be mentioned, it shall be sufficient, without further description and without any copy or facsimile, to state that trade mark or forged trade mark to be a trade mark or forged trade mark.

10. In any prosecution for an offence against this Act,—

(1.) A defendant, and his wife or her husband, as the case may be, may, if the defendant thinks fit, be called as a witness, and, if called, shall be sworn and examined, and may be cross-examined and re-examined in like manner as any other witness.

## MERCHANDISE MARKS ACT, 1887.

(2.) In the case of imported goods, evidence of the port of shipment shall be *primâ facie* evidence of the place or country in which the goods were made or produced.

11. Any person who, being within the United Kingdom, procures, counsels, aids, abets, or is accessory to the commission, without the United Kingdom, of any act which, if committed in the United Kingdom, would under this Act be a misdemeanour, shall be guilty of that misdemeanour as a principal, and be liable to be indicted, proceeded against, tried, and convicted in any country or place in the United Kingdom in which he may be, as if the misdemeanour had been there committed.

12.—(1.) Where, upon information of an offence against this Act, a justice has issued either a summons requiring the defendant charged by such information to appear to answer to the same, or a warrant for the arrest of such defendant, and either the said justice on or after issuing the summons or warrant, or any other justice, is satisfied by information on oath that there is reasonable cause to suspect that any goods or things by means of or in relation to which such offence has been committed are in any house or premises of the defendant, or otherwise in his possession or under his control in any place, such justice may issue a warrant under his hand by virtue of which it shall be lawful for any constable named or referred to in the warrant, to enter such house, premises, or place at any reasonable time by day, and to search there for and seize and take away those goods or things; and any goods or things seized under any such warrant shall be brought before a court of summary jurisdiction for the purpose of its being determined whether the same are or are not liable to forfeiture under this Act.

(2.) If the owner of any goods or things which, if the owner thereof had been convicted, would be liable to forfeiture under this Act, is unknown or cannot be found, an information or complaint may be laid for the purpose only of enforcing such forfeiture, and a court of summary jurisdiction may cause notice to be advertised stating that, unless cause is shown to the contrary at the time and place named in the notice, such goods or things will be forfeited, and at such time and place the court, unless the owner or any person on his behalf, or other person interested in the goods or things, shows cause to the contrary, may order such goods or things or any of them to be forfeited.

(3.) Any goods or things forfeited under this section, or under any other provision of this Act, may be destroyed or otherwise disposed of, in such manner as the court by which the same are forfeited may direct, and the court may, out of any proceeds which may be realised by the disposition of such goods (all trade marks and trade descriptions being first obliterated), award to any innocent party any loss he may have innocently sustained in dealing with such goods.

13. The Act of the session of the twenty-second and twenty-third years of the reign of Her present Majesty, chapter seventeen, intituled "An Act to prevent vexatious indictments for certain misdemeanours," shall apply to any offence



## MERCHANDISE MARKS ACT, 1887.

punishable on indictment under this Act, in like manner as if such offence were one of the offences specified in section one of that Act, but this section shall not apply to Scotland.

14. On any prosecution under this Act the court may order costs to be paid to the defendant by the prosecutor, or to the prosecutor by the defendant, having regard to the information given by and the conduct of the defendant and prosecutor respectively.

15. No prosecution for an offence against this Act shall be commenced after the expiration of three years next after the commission of the offence, or one year next after the first discovery thereof by the prosecutor, whichever expiration first happens.

16. Whereas it is expedient to make further provision for prohibiting the importation of goods which, if sold, would be liable to forfeiture under this Act; be it therefore enacted as follows:

- (1.) All such goods, and also all goods of foreign manufacture bearing any name or trade mark being or purporting to be the name or trade mark of any manufacturer, dealer, or trader in the United Kingdom, unless such name or trade mark is accompanied by a definite indication of the country in which the goods were made or produced, are hereby prohibited to be imported into the United Kingdom, and, subject to the provisions of this section, shall be included among goods prohibited to be imported as if they were specified in section forty-two of the Customs Consolidation Act, 1876.
- (2.) Before detaining any such goods, or taking any further proceedings with a view to the forfeiture thereof under the law relating to the Customs, the Commissioners of Customs may require the regulations under this section, whether as to information, security, conditions, or other matters, to be complied with, and may satisfy themselves in accordance with those regulations that the goods are such as are prohibited by this section to be imported.
- (3.) The Commissioners of Customs may from time to time make, revoke and vary, regulations, either general or special, respecting the detention and forfeiture of goods the importation of which is prohibited by this section, and the conditions, if any, to be fulfilled before such detention and forfeiture, and may by such regulations determine the information, notices, and security to be given, and the evidence requisite for any of the purposes of this section, and the mode of verification of such evidence.
- (4.) Where there is on any goods a name which is identical with or a colourable imitation of the name of a place in the United Kingdom, that name, unless accompanied by the name of the country in which such place is situate, shall be treated for the purposes of this section as if it were the name of a place in the United Kingdom.
- (5.) Such regulations may apply to all goods the importation of which is prohibited by this section, or different regulations may be made respecting different classes of such goods or of offences in relation to such goods.

## MERCHANDISE MARKS ACT, 1887.

- (6.) The Commissioners of Customs, in making and in administering the regulations, and generally in the administration of this section, whether in the exercise of any discretion or opinion, or otherwise, shall act under the control of the Commissioners of Her Majesty's Treasury.
- (7.) The regulations may provide for the informant reimbursing the Commissioners of Customs all expenses and damages incurred in respect of any detention made on his information, and of any proceedings consequent on such detention.
- (8.) All regulations under this section shall be published in the "London Gazette" and in the "Board of Trade Journal."
- (9.) This section shall have effect as if it were part of the Customs Consolidation Act, 1876, and shall accordingly apply to the Isle of Man as if it were part of the United Kingdom.
- (10.) Section two of the Revenue Act, 1883, shall be repealed as from a day fixed by regulations under this section, not being later than the first day of January one thousand eight hundred and eighty-eight, without prejudice to anything done or suffered thereunder.

17. On the sale or in the contract for the sale of any goods to which a trade mark, or mark, or trade description has been applied, the vendor shall be deemed to warrant that the mark is a genuine trade mark and not forged or falsely applied, or that the trade description is not a false trade description within the meaning of this Act, unless the contrary is expressed in some writing signed by or on behalf of the vendor and delivered at the time of the sale or contract to and accepted by the vendee.

18. Where, at the passing of this Act, a trade description is lawfully and generally applied to goods of a particular class, or manufactured by a particular method, to indicate the particular class or method of manufacture of such goods, the provisions of this Act with respect to false trade descriptions shall not apply to such trade description when so applied: Provided that where such trade description includes the name of a place or country, and is calculated to mislead as to the place or country where the goods to which it is applied were actually made or produced, and the goods are not actually made or produced in that place or country, this section shall not apply unless there is added to the trade description, immediately before or after the name of that place or country, in an equally conspicuous manner, with that name, the name of the place or country in which the goods were actually made or produced, with a statement that they were made or produced there.

19.—(1.) This Act shall not exempt any person from any action, suit, or other proceedings which might, but for the provisions of this Act, be brought against him.

(2.) Nothing in this Act shall entitle any person to refuse to make a complete discovery, or to answer any question or interrogatory in any action, but such discovery or answer shall not be admissible in evidence against such person in any prosecution for an offence against this Act.



## MERCHANDISE MARKS ACT, 1887.

(3.) Nothing in this Act shall be construed so as to render liable to any prosecution or punishment any servant of a master resident in the United Kingdom who *bonâ fide* acts in obedience to the instructions of such master, and, on demand made by or on behalf of the prosecutor, has given full information as to his master.

20. Any person who falsely represents that any goods are made by a person holding a Royal Warrant, or for the service of Her Majesty, or any of the Royal Family, or any Government department, shall be liable, on summary conviction, to a penalty not exceeding twenty pounds.

21. In the application of this Act to Scotland the following modifications shall be made :—

The expression “Summary Jurisdiction Acts” means the Summary Procedure Act, 1864, and any Acts amending the same.

The expression “justice” means sheriff.

The expression “court of summary jurisdiction” means the Sheriff Court, and all jurisdiction necessary for the purpose of this Act is hereby conferred on sheriffs.

22. In the application of this Act to Ireland, the following modifications shall be made :—

The expression “Summary Jurisdiction Acts” means, so far as respects the police districts of the Dublin metropolis, the Acts regulating the powers and duties of justices of the peace of such district, and as regards the rest of Ireland means the Petty Sessions (Ireland) Act, 1851, and any Act amending the same.

The expression “court of summary jurisdiction” means justices acting under those Acts.

23. The Merchandise Marks Act, 1862, is hereby repealed, and any unrepealed enactment referring to any enactment so repealed shall be construed to apply to the corresponding provision of this Act ; provided that this repeal shall not affect—

(a) any penalty, forfeiture, or punishment incurred in respect of any offence committed against any enactment hereby repealed ; nor

(b) the institution or continuance of any proceeding or other remedy under any enactment so repealed for the recovery of any penalty incurred, or for the punishment of any offence committed, before the commencement of this Act nor

(c) any right, privilege, liability, or obligation acquired, accrued, or incurred under any enactment hereby repealed.

## IMPORT DUTIES IN THE UNITED KINGDOM.

NOTE.—In this Table subdivisions of Articles of a similar nature, and subject to the same Rate of Duty, are classed under one head.

*TABLE showing the several ARTICLES subject to IMPORT DUTIES in the UNITED KINGDOM, and the RATE of DUTY levied upon each ARTICLE, according to the TARIFF now in operation.*

| ARTICLES.                                                                |          | Rates<br>of Duty. |
|--------------------------------------------------------------------------|----------|-------------------|
|                                                                          |          | £ s. d.           |
| COCOA .....                                                              | per lb.  | 0 0 1             |
| Husks and Shells .....                                                   | per cwt. | 0 2 0             |
| Cocoa or Chocolate, ground, prepared or in any way<br>manufactured ..... | per lb.  | 0 0 2             |
| COFFEE, raw .....                                                        | per cwt. | 0 14 0            |
| Kiln-dried, roasted, or ground .....                                     | per lb.  | 0 0 2             |
| Coffee and chicory, mixed .....                                          | „        | 0 0 2             |
| CHICORY :—                                                               |          |                   |
| Raw or kiln-dried .....                                                  | per cwt. | 0 13 3            |
| Roasted or ground .....                                                  | per lb.  | 0 0 2             |
| FRUIT :—                                                                 |          |                   |
| Currants, Figs and Fig Cake, Plums, Prunes, and Raisins                  | per cwt. | 0 7 0             |
| TEA .....                                                                | per lb.  | 0 0 6             |
| TOBACCO :—                                                               |          |                   |
| Unmanufactured, Stemmed, or Unstemmed :—                                 |          |                   |
| Containing in every 100lbs. { 10lbs. or more of moisture.                | „        | 0 3 6             |
| weight thereof ..... { less than 10lbs. of moisture.                     | „        | 0 3 10            |



## IMPORT DUTIES IN THE UNITED KINGDOM.

## ARTICLES.

Rates  
of Duty.

## TOBACCO—Manufactured:—

£ s. d.

|                                                                                                               |         |        |
|---------------------------------------------------------------------------------------------------------------|---------|--------|
| Segars .....                                                                                                  | per lb. | 0 5 6  |
| Cavendish or Negrohead .....                                                                                  | „       | 0 4 10 |
| Snuff containing in every } more than 13lbs. of moisture..                                                    | „       | 0 4 1  |
| 100lbs. weight thereof } not more than 13lbs. of moisture                                                     | „       | 0 4 10 |
| Other Manufactured Tobacco, and Cavendish or Negrohead Manufactured in Bond from Unmanufactured Tobacco ..... | „       | 0 4 4  |

## \*WINE:—

|                                                                                                          |                            |       |
|----------------------------------------------------------------------------------------------------------|----------------------------|-------|
| Not exceeding 30 degrees of Proof Spirit .....                                                           | per gallon                 | 0 1 0 |
| Exceeding 30 degrees but not exceeding 42 degrees of Proof Spirit .....                                  | „                          | 0 2 6 |
| And for every degree or part of a degree beyond the highest above charged, an additional duty .....      | „                          | 0 0 3 |
| Beer and Ale, the worts of which were, before fermentation, of a specific gravity of 1,057 degrees ..... | per barrel } of 36 gals. } | 0 6 6 |
| And so on in proportion for any difference in gravity.                                                   |                            |       |

## BEER, MUM, AND SPRUCE:—

The worts of which were, before fermentation, of a specific gravity—

|                                   |   |        |
|-----------------------------------|---|--------|
| Not exceeding 1,215 degrees ..... | „ | 1 6 0  |
| Exceeding 1,215 degrees .....     | „ | 1 10 6 |

## SPIRITS OR STRONG WATERS:—

|                                                                                                                                                                                                                                    |                    |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------|
| For every gallon computed at hydrometer proof of Spirits of any description (except perfumed Spirits), including Naphtha or Methylic Alcohol, purified so as to be potable; and mixtures and preparations containing Spirits ..... | per proof gallon } | 0 10 4 |
| For every gallon of perfumed Spirits .....                                                                                                                                                                                         | per gallon         | 0 16 6 |
| Liqueurs, Cordials, or other preparations containing Spirits, in Bottle, entered in such a manner as to indicate that the strength is not to be tested .....                                                                       | „                  | 0 14 0 |
| Chloroform .....                                                                                                                                                                                                                   | per lb.            | 0 3 0  |
| Chloral Hydrate .....                                                                                                                                                                                                              | „                  | 0 1 3  |
| Collodion .....                                                                                                                                                                                                                    | per gallon         | 1 4 0  |
| Ether, Sulphuric .....                                                                                                                                                                                                             | „                  | 1 5 0  |
| Ethyl, Iodide of .....                                                                                                                                                                                                             | „                  | 0 13 0 |
| Soap, Transparent, in the manufacture of which Spirit has been used .....                                                                                                                                                          | per lb.            | 0 0 3  |

|                      |                    |       |
|----------------------|--------------------|-------|
| CARDS, Playing ..... | per doz. } packs } | 0 3 9 |
|----------------------|--------------------|-------|

|                   |              |        |
|-------------------|--------------|--------|
| PLATE, Gold ..... | per oz. Troy | 0 17 0 |
| „ Silver .....    | „            | 0 1 6  |

\* These duties came into force on the 15th August, 1886. The duties previously in force were as follow:—Wine—containing less than 26 degrees of Proof Spirit, 1s. per gallon; containing less than 42 degrees of Proof Spirit, 2s. 6d. per gallon; with an additional duty of 3d. per gallon for every degree of strength beyond the highest above specified.

*A STATEMENT of the GROSS RECEIPTS of CUSTOMS REVENUE (inclusive of CHARGES, &c.) in each DIVISION  
of the UNITED KINGDOM during each of the last TEN FINANCIAL YEARS.*

| Year<br>ended<br>31st March | ENGLAND AND WALES. |            |             |                                    |            | SCOTLAND.            |                                    |           | IRELAND.             |                                    |           | TOTAL<br>UNITED<br>KINGDOM.* |
|-----------------------------|--------------------|------------|-------------|------------------------------------|------------|----------------------|------------------------------------|-----------|----------------------|------------------------------------|-----------|------------------------------|
|                             | London.            | Liverpool. | Other Ports | Collected<br>by Inland<br>Revenue. | Total.     | At all the<br>Ports. | Collected<br>by Inland<br>Revenue. | Total.    | At all the<br>Ports. | Collected<br>by Inland<br>Revenue. | Total.    |                              |
|                             |                    |            |             |                                    |            |                      |                                    |           |                      |                                    |           |                              |
| £                           | £                  | £          | £           | £                                  | £          | £                    | £                                  | £         | £                    | £                                  | £         | £                            |
| 1878 ..                     | 9,948,548          | 3,036,676  | 2,798,403   | 634,097                            | 16,417,724 | 1,654,276            | 170,227                            | 1,824,503 | 1,851,016            | 101,372                            | 1,952,388 | 20,194,615                   |
| 1879 ..                     | 10,266,538         | 3,098,189  | 2,836,277   | 615,521                            | 16,816,525 | 1,615,632            | 126,873                            | 1,742,505 | 1,839,938            | 98,343                             | 1,938,281 | 20,497,311                   |
| 1880 ..                     | 9,686,712          | 2, 19,097  | 2,725,881   | 590,082                            | 15,821,772 | 1,508,949            | 79,175                             | 1,588,124 | 1,804,715            | 84,998                             | 1,889,713 | 19,299,609                   |
| 1881 ..                     | 9,565,075          | 2,902,141  | 2,784,258   | 591,202                            | 15,842,676 | 1,508,086            | 78,965                             | 1,587,051 | 1,835,905            | 89,015                             | 1,924,920 | 19,354,647                   |
| 1882 ..                     | 9,640,796          | 2,868,244  | 2,772,962   | 557,852                            | 15,839,854 | 1,532,232            | 96,273                             | 1,628,505 | 1,867,675            | 96,654                             | 1,964,329 | 19,432,688                   |
| 1883 ..                     | 9,870,607          | 2,842,221  | 2,492,646   | 962,517                            | 16,167,991 | 1,557,719            | 121,647                            | 1,679,366 | 1,878,816            | 108,138                            | 1,986,954 | 19,834,311                   |
| 1884 ..                     | 10,175,758         | 2,904,504  | 1,937,050   | 1,138,646                          | 16,155,958 | 1,516,295            | 183,986                            | 1,700,281 | 1,792,366            | 165,953                            | 1,958,319 | 19,814,558                   |
| 1885 ..                     | 10,459,088         | 2,770,196  | 2,212,675   | 1,460,437                          | 16,902,396 | 1,573,981            | 208,638                            | 1,782,619 | 1,714,655            | 323,647                            | 2,038,302 | 20,723,317                   |
| 1886 ..                     | 10,073,206         | 2,690,934  | 2,065,218   | 1,469,125                          | 16,298,483 | 1,469,626            | 199,949                            | 1,669,575 | 1,621,479            | 327,458                            | 1,948,937 | 19,916,995                   |
| 1887 ..                     | 10,217,555         | 2,704,669  | 2,078,877   | 1,550,768                          | 16,551,869 | 1,477,293            | 199,300                            | 1,676,593 | 1,869,427            | 214,996                            | 2,084,423 | 20,312,885                   |

\* These amounts include the Isle of Man Revenue.



# INCOME TAX RATES FROM ITS FIRST IMPOSITION IN 1842 TO THE PRESENT TIME.

| From and to<br>April 5th. | Income<br>free<br>under. | On £100<br>to<br>£150. | On £100<br>and<br>upw'ds. | Chancellor of the<br>Exchequer. | Premier.              |
|---------------------------|--------------------------|------------------------|---------------------------|---------------------------------|-----------------------|
|                           | £                        | Rate in the £          |                           |                                 |                       |
| 1842 to 1846              | 150                      | —                      | 7d.                       | Henry Goulburn.                 | Sir Robert Peel.      |
| 1846 „ 1852               | Do.                      | —                      | 7d.                       | Sir Charles Wood.               | Lord John Russell.    |
| 1852 „ 1853               | Do.                      | —                      | 7d.                       | Benjamin Disraeli.              | Earl of Derby.        |
| 1853 „ 1854               | 100                      | 5d.                    | 7d.                       | William E. Gladstone.           | Earl of Aberdeen.     |
| 1854 „ 1855               | Do.                      | 10d.                   | 1s. 2d.                   | Do.                             | Do.                   |
| 1855 „ 1857               | Do.                      | 11½d.                  | 1s. 4d.                   | Sir G. Cornwall Lewis.          | Viscount Palmerston.  |
| 1857 „ 1858               | Do.                      | 5d.                    | 7d.                       | Do.                             | Do.                   |
| 1858 „ 1859               | Do.                      | 5d.                    | 5d.                       | Do.                             | Do.                   |
| 1859 „ 1860               | Do.                      | 6½d.                   | 9d.                       | Benjamin Disraeli.              | Earl of Derby.        |
| 1860 „ 1861               | Do.                      | 7d.                    | 10d.                      | William E. Gladstone.           | Viscount Palmerston.  |
| 1861 „ 1863               | *100                     | 6d.                    | 9d.                       | Do.                             | Do.                   |
| 1863 „ 1864               | Do.                      | 7d.                    |                           | Do.                             | Do.                   |
| 1864 „ 1865               | Do.                      | 6d.                    |                           | Do.                             | Do.                   |
| 1865 „ 1866               | Do.                      | 4d.                    |                           | Do.                             | Do.                   |
| 1866 „ 1867               | Do.                      | 4d.                    |                           | Do.                             | Earl Russell.         |
| 1867 „ 1868               | Do.                      | 5d.                    |                           | Benjamin Disraeli.              | Earl of Derby.        |
| 1868 „ 1869               | Do.                      | 6d.                    |                           | George Ward Hunt.               | Benjamin Disraeli.    |
| 1869 „ 1870               | Do.                      | 5d.                    |                           | Robert Lowe.                    | William E. Gladstone. |
| 1870 „ 1871               | Do.                      | 4d.                    |                           | Do.                             | Do.                   |
| 1871 „ 1872               | Do.                      | 6d.                    |                           | Do.                             | Do.                   |
| 1872 „ 1873               | Do.                      | 4d.                    |                           | Do.                             | Do.                   |
| 1873 „ 1874               | Do.                      | 3d.                    |                           | Do.                             | Do.                   |
| 1874 „ 1876               | Do.                      | 2d.                    |                           | Sir Stafford Northcote.         | Benjamin Disraeli.    |
| 1876 „ 1878               | †150                     | 3d.                    |                           | Do.                             | Earl of Beaconsfield. |
| 1878 „ 1880               | Do.                      | 5d.                    |                           | Do.                             | Do.                   |
| 1880 „ 1881               | Do.                      | 6d.                    |                           | William E. Gladstone.           | William E. Gladstone. |
| 1881 „ 1882               | Do.                      | 5d.                    |                           | Do.                             | Do.                   |
| 1882 „ 1883               | Do.                      | 6½d.                   |                           | Do.                             | Do.                   |
| 1883 „ 1884               | Do.                      | 5d.                    |                           | Hugh C. E. Childers.            | Do.                   |
| 1884 „ 1885               | Do.                      | 6d.                    |                           | Do.                             | Do.                   |
| 1885 „ 1886               | Do.                      | 8d.                    |                           | Sir M. Hicks-Beach.             | Marquis of Salisbury. |
| 1886 „ 1887               | (Do.                     | 8d.                    |                           | Sir William Harcourt.           | William E. Gladstone. |
| 1886 „ )                  | (Do.                     | 8d.                    |                           | Ld. Randolph Churchill.         | Marquis of Salisbury. |
| 1887 „ 1888               | Do.                      | 7d.                    |                           | G. J. Goschen.                  | Do.                   |

## TOTAL ANNUAL VALUE OF PROPERTY AND INCOME ASSESSED, 1875—86.

| Year. | England.     | Scotland.   | Ireland.    | United Kingdom. | Year. |
|-------|--------------|-------------|-------------|-----------------|-------|
| 1875  | £481,774,580 | £53,934,528 | £35,347,059 | £571,056,167    | 1875  |
| 1877  | 480,425,213  | 54,441,576  | 35,464,600  | 570,331,389     | 1877  |
| 1878  | 486,698,836  | 55,712,709  | 35,929,649  | 578,294,971     | 1878  |
| 1879  | 485,939,056  | 55,897,204  | 36,210,037  | 578,046,297     | 1879  |
| 1880  | 485,676,370  | 55,079,954  | 36,140,577  | 576,896,901     | 1880  |
| 1881  | 493,583,819  | 55,530,028  | 36,110,043  | 585,223,890     | 1881  |
| 1882  | 507,644,153  | 57,607,470  | 36,199,354  | 601,450,977     | 1882  |
| 1883  | 516,948,272  | 59,406,708  | 36,481,078  | 612,836,058     | 1883  |
| 1884  | 530,538,379  | 61,117,685  | 36,854,135  | 628,510,199     | 1884  |
| 1885  | 533,429,560  | 61,125,422  | 36,912,150  | 631,467,132     | 1885  |
| 1886  | 533,038,774  | 60,057,933  | 36,758,915  | 629,855,622     | 1886  |

\* Differential rate upon scale of incomes abolished. Incomes under £100 are exempt; and incomes of £100 and under £199 per annum have an abatement from the assessment of £60:—thus, £100 pays on £40; £160 upon £100; £199 upon £139; but £200 pays on £200.

† Under £150 exempt if under £400 the tax is not chargeable upon the first £120.

AN ACCOUNT OF THE PUBLIC INCOME AND EXPENDITURE OF THE UNITED KINGDOM FOR THE YEAR  
ENDING MARCH 31ST, 1887;

DISTINGUISHING THE SEVERAL AMOUNTS RAISED BY TAXATION AND THOSE RECEIVED FROM OTHER SOURCES OF REVENUE.

| INCOME.                              |                    | EXPENDITURE.                            |                    |
|--------------------------------------|--------------------|-----------------------------------------|--------------------|
| TAXATION:—                           | £                  | PUBLIC DEBT:—                           | £                  |
| Customs.....                         | 20,155,000         | Interest and other Charges .....        | 21,487,024         |
| Excise .....                         | 25,250,000         | Redemption of Debt .....                | 8,214,890          |
| Land Tax and House Duty .....        | 2,980,000          |                                         |                    |
| Property and Income Tax .....        | 15,900,000         | Army .....                              | 29,701,914         |
| Stamps .....                         | 11,830,000         | Navy .....                              | 18,429,272         |
|                                      |                    | Post-office .....                       | 13,265,402         |
| SERVICES UNDERTAKEN BY THE CROWN:—   | 76,115,000         | Telegraphs .....                        | 5,436,892          |
| Postal.....                          | 8,450,000          | Packet Service .....                    | 1,935,000          |
| Telegraphs .....                     | 1,830,000          |                                         | 724,900            |
| Miscellaneous .....                  | 451,950            |                                         |                    |
|                                      |                    | CIVIL SERVICES—VARIOUS PAYMENTS:—       | 8,096,792          |
| CIVIL SERVICES—VARIOUS RECEIPTS:—    | 10,731,950         | Civil Departments .....                 | 17,826,454         |
| Civil Departments, &c. ....          | 1,162,999          | Customs .....                           | 949,216            |
| Fee and Patent Stamps .....          | 714,039            | Inland Revenue .....                    | 1,727,702          |
| Customs .....                        | 42,376             |                                         |                    |
| Inland Revenue .....                 | 26,656             |                                         | 20,503,372         |
|                                      | 1,946,070          |                                         |                    |
| MISCELLANEOUS:—                      |                    |                                         |                    |
| Interest on Advances, &c. ....       | 1,176,192          |                                         |                    |
| Crown Lands—Net Rents .....          | 370,000            |                                         |                    |
| Profits from Bank of England .....   | 153,895            |                                         |                    |
| Profit from Savings Banks .....      | 64,609             |                                         |                    |
| Indian Revenue, on account of Army.. | 28,027             |                                         |                    |
| Various Receipts .....               | 187,015            |                                         |                    |
|                                      | 1,979,738          | Excess of Income over Expenditure ..... | 776,006            |
|                                      | <u>£90,772,758</u> |                                         | <u>£90,772,758</u> |



## MARGARINE ACT, 1887.

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50 AND 51 VICT., CHAPTER 29.

An Act for the better Prevention of the Fraudulent Sale of 'Margarine.

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**W**HEREAS it is expedient that further provision should be made for protecting the public against the sale as butter of substances made in imitation of butter, as well as of butter mixed with any such substances :

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

1. This Act may be cited as the Margarine Act, 1887.
2. This Act shall come into operation on the first day of January, one thousand eight hundred and eighty-eight.
3. The word "butter" shall mean the substance usually known as butter, made exclusively from milk or cream, or both, with or without salt or other preservative, and with or without the addition of colouring matter.  
The word "margarine" shall mean all substances, whether compounds or otherwise, prepared in imitation of butter, and whether mixed with butter or not, and no such substance shall be lawfully sold, except under the name of margarine, and under the conditions set forth in this Act.
4. Every person dealing in margarine, whether wholesale or retail, whether a manufacturer, importer, or as consignor or consignee, or as commission agent or otherwise, who is found guilty of an offence under this Act, shall be liable on summary conviction for the first offence to a fine not exceeding twenty pounds, and for the second offence to a fine not exceeding fifty pounds, and for the third or any subsequent offence to a fine not exceeding one hundred pounds.
5. Where an employer is charged with an offence against this Act he shall be entitled, upon information duly laid by him, to have any other person whom he charges as the actual offender brought before the court at the time appointed for

## MARGARINE ACT, 1887.

hearing the charge, and if, after the commission of the offence has been proved, the employer proves to the satisfaction of the court that he had used due diligence to enforce the execution of this Act, and that the said other person had committed the offence in question without his knowledge, consent, or connivance, the said other person shall be summarily convicted of such offence, and the employer shall be exempt from any penalty.

6. Every person dealing in margarine in the manner described in the preceding section shall conform to the following regulations :

Every package, whether open or closed, and containing margarine, shall be branded or durably marked "Margarine" on the top, bottom, and sides, in printed capital letters, not less than three-quarters of an inch square ; and if such margarine be exposed for sale, by retail, there shall be attached to each parcel thereof so exposed, and in such manner as to be clearly visible to the purchaser, a label marked in printed capital letters not less than one and a half inches square, "Margarine ;" and every person selling margarine by retail, save in a package duly branded or durably marked as aforesaid, shall in every case deliver the same to the purchaser in or with a paper wrapper, on which shall be printed in capital letters, not less than a quarter of an inch square, "Margarine."

7. Every person dealing with, selling, or exposing, or offering for sale, or having in his possession for the purpose of sale, any quantity of margarine contrary to the provisions of this Act, shall be liable to conviction for an offence against this Act, unless he shows to the satisfaction of the court before whom he is charged that he purchased the article in question as butter, and with a written warranty or invoice to that effect, that he had no reason to believe at the time when he sold it that the article was other than butter, and that he sold it in the same state as when he purchased it, and in such case he shall be discharged from the prosecution, but shall be liable to pay the costs incurred by the prosecutor unless he shall have given due notice to him that he will rely upon the above defence.

8. All margarine imported into the United Kingdom of Great Britain and Ireland, and all margarine whether imported or manufactured within the United Kingdom of Great Britain and Ireland, shall, whenever forwarded by any public conveyance, be duly consigned as margarine ; and it shall be lawful for any officer of Her Majesty's Customs or Inland Revenue, or any medical officer of health, inspector of nuisances, or police constable, authorised under section thirteen of the Sale of Food and Drugs Act, 1875, to procure samples for analysis if he shall have reason to believe that the



## MARGARINE ACT, 1887.

provisions of this Act are infringed on this behalf, to examine and take samples from any package, and ascertain, if necessary by submitting the same to be analysed, whether an offence against this Act has been committed.

9. Every manufactory of margarine within the United Kingdom of Great Britain and Ireland shall be registered by the owner or occupier thereof with the local authority from time to time in such manner as the Local Government Boards of England and Ireland and the Secretary for Scotland respectively may direct, and every such owner or occupier carrying on such manufacture in a manufactory not duly registered shall be guilty of an offence under this Act.

10. Any officer authorised to take samples under the Sale of Food and Drugs Act, 1875, may, without going through the form of purchase provided by that Act, but otherwise acting in all respects in accordance with the provisions of the said Act as to dealing with samples, take for the purposes of analysis samples of any butter, or substances purporting to be butter, which are exposed for sale, and are not marked margarine, as provided by this Act; and any such substance not being so marked shall be presumed to be exposed for sale as butter.

11. Any part of any penalty recovered under this Act may, if the court shall so direct, be paid to the person who proceeds for the same, to reimburse him for the legal costs of obtaining the analysis, and any other reasonable expenses to which the court shall consider him entitled.

12. All proceedings under this Act shall, save as expressly varied by this Act, be the same as prescribed by sections twelve to twenty-eight inclusive of the Sale of Food and Drugs Act, 1875, and all officers employed under that Act are hereby empowered and required to carry out the provisions of this Act.

13. The expression "local authority" shall mean any local authority authorised to appoint a public analyst under the Sale of Food and Drugs Act, 1875.

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AVERAGE PRICE PER £100 of the THREE PER CENT CONSOLIDATED STOCK of the PUBLIC FUNDS of the UNITED  
KINGDOM, in EACH MONTH in EACH YEAR from 1872 to 1886.

| MONTHS.                   | 1872.              | 1873.              | 1874.              | 1875.              | 1876.              | 1877.              | 1878.               | 1879.              | 1880.              | 1881.              | 1882.               | 1883.               | 1884.               | 1885.              | 1886.              | MONTHS.                       |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|-------------------------------|
| January....               | £ 92 $\frac{5}{8}$ | £ 92 $\frac{1}{8}$ | £ 92 $\frac{1}{8}$ | £ 92 $\frac{3}{8}$ | £ 93 $\frac{1}{8}$ | £ 95 $\frac{1}{4}$ | £ 95 $\frac{3}{16}$ | £ 95 $\frac{3}{8}$ | £ 97 $\frac{1}{2}$ | £ 98 $\frac{5}{8}$ | £ 99 $\frac{1}{16}$ | £ 101 $\frac{1}{2}$ | £ 101 $\frac{1}{4}$ | £ 99 $\frac{3}{4}$ | £ 99 $\frac{1}{2}$ | January.                      |
| February...               | 92                 | 92 $\frac{3}{8}$   | 92 $\frac{1}{8}$   | 92 $\frac{1}{2}$   | 94 $\frac{3}{16}$  | 95 $\frac{1}{8}$   | 95 $\frac{9}{16}$   | 96 $\frac{1}{4}$   | 98 $\frac{1}{8}$   | 98 $\frac{1}{16}$  | 99 $\frac{7}{8}$    | 102 $\frac{1}{4}$   | 101 $\frac{1}{4}$   | 99 $\frac{1}{2}$   | 100 $\frac{1}{4}$  | February.                     |
| March.....                | 92 $\frac{3}{8}$   | 92 $\frac{5}{8}$   | 92                 | 93                 | 94 $\frac{3}{16}$  | 96 $\frac{1}{16}$  | 95 $\frac{1}{4}$    | 96 $\frac{3}{8}$   | 97 $\frac{1}{8}$   | 99 $\frac{3}{4}$   | 100 $\frac{7}{8}$   | 102 $\frac{1}{8}$   | 101 $\frac{9}{16}$  | 97 $\frac{3}{8}$   | 100 $\frac{7}{16}$ | March.                        |
| April .....               | 92 $\frac{3}{8}$   | 93 $\frac{1}{4}$   | 92 $\frac{1}{2}$   | 93 $\frac{1}{4}$   | 94 $\frac{1}{16}$  | 95 $\frac{3}{8}$   | 94 $\frac{1}{8}$    | 98 $\frac{1}{8}$   | 98 $\frac{5}{8}$   | 100 $\frac{1}{16}$ | 101 $\frac{5}{8}$   | 102 $\frac{3}{8}$   | 102 $\frac{1}{2}$   | 96 $\frac{1}{4}$   | 100 $\frac{3}{8}$  | April.                        |
| May .....                 | 93 $\frac{1}{8}$   | 93 $\frac{1}{2}$   | 93 $\frac{1}{4}$   | 94                 | 96                 | 94 $\frac{1}{4}$   | 96 $\frac{3}{16}$   | 98 $\frac{3}{4}$   | 99 $\frac{1}{2}$   | 102 $\frac{1}{16}$ | 102                 | 101 $\frac{1}{8}$   | 101 $\frac{1}{2}$   | 99 $\frac{1}{4}$   | 101 $\frac{1}{2}$  | May.                          |
| June .....                | 92 $\frac{3}{8}$   | 92 $\frac{1}{4}$   | 92 $\frac{5}{8}$   | 93                 | 94 $\frac{1}{4}$   | 94 $\frac{1}{2}$   | 95 $\frac{7}{8}$    | 97 $\frac{1}{4}$   | 98 $\frac{3}{8}$   | 100 $\frac{3}{8}$  | 100 $\frac{1}{4}$   | 100 $\frac{1}{2}$   | 100 $\frac{1}{16}$  | 99 $\frac{3}{4}$   | 100 $\frac{9}{16}$ | June.                         |
| July .....                | 92 $\frac{1}{2}$   | 92 $\frac{1}{2}$   | 92 $\frac{5}{8}$   | 94 $\frac{1}{4}$   | 95 $\frac{1}{2}$   | 94 $\frac{1}{2}$   | 95 $\frac{1}{16}$   | 97 $\frac{3}{8}$   | 98 $\frac{3}{8}$   | 101 $\frac{1}{8}$  | 99 $\frac{1}{16}$   | 99 $\frac{1}{8}$    | 100 $\frac{1}{4}$   | 99 $\frac{3}{8}$   | 101 $\frac{3}{16}$ | July.                         |
| August ....               | 92 $\frac{1}{2}$   | 92 $\frac{3}{4}$   | 92 $\frac{1}{2}$   | 94 $\frac{3}{8}$   | 96 $\frac{1}{16}$  | 95 $\frac{5}{8}$   | 94 $\frac{1}{16}$   | 97 $\frac{3}{4}$   | 97 $\frac{1}{2}$   | 100 $\frac{1}{4}$  | 99 $\frac{3}{4}$    | 99 $\frac{5}{8}$    | 100 $\frac{3}{8}$   | 100                | 101 $\frac{1}{16}$ | August.                       |
| September ..              | 92 $\frac{3}{8}$   | 92 $\frac{1}{2}$   | 92 $\frac{5}{8}$   | 94 $\frac{3}{8}$   | 95 $\frac{7}{8}$   | 95 $\frac{1}{2}$   | 94 $\frac{1}{16}$   | 97 $\frac{3}{4}$   | 97 $\frac{3}{8}$   | 99 $\frac{1}{2}$   | 99 $\frac{7}{8}$    | 100 $\frac{5}{8}$   | 101 $\frac{1}{8}$   | 100 $\frac{1}{2}$  | 100 $\frac{9}{16}$ | September.                    |
| October .....             | 92 $\frac{1}{4}$   | 92 $\frac{1}{2}$   | 92 $\frac{3}{4}$   | 94 $\frac{1}{16}$  | 95 $\frac{7}{16}$  | 95 $\frac{3}{4}$   | 94 $\frac{1}{4}$    | 98                 | 98 $\frac{9}{16}$  | 98 $\frac{1}{16}$  | 101 $\frac{1}{16}$  | 101 $\frac{1}{4}$   | 100 $\frac{9}{16}$  | 100 $\frac{3}{8}$  | 100 $\frac{1}{4}$  | October.                      |
| November ..               | 92 $\frac{3}{8}$   | 92 $\frac{5}{8}$   | 93 $\frac{1}{8}$   | 94 $\frac{5}{8}$   | 95 $\frac{3}{8}$   | 96 $\frac{1}{16}$  | 95 $\frac{1}{16}$   | 98 $\frac{1}{4}$   | 99 $\frac{1}{16}$  | 100 $\frac{1}{4}$  | 102 $\frac{1}{16}$  | 101 $\frac{1}{16}$  | 100 $\frac{1}{2}$   | 100 $\frac{1}{2}$  | 101 $\frac{3}{8}$  | November.                     |
| December ..               | 91                 | 92                 | 91 $\frac{5}{8}$   | 93 $\frac{7}{8}$   | 94                 | 95 $\frac{3}{16}$  | 94 $\frac{3}{8}$    | 97 $\frac{3}{8}$   | 98 $\frac{3}{4}$   | 99 $\frac{5}{16}$  | 100 $\frac{1}{16}$  | 100 $\frac{1}{4}$   | 99 $\frac{1}{4}$    | 100                | 100 $\frac{1}{2}$  | December.                     |
| Average for<br>the Year.. | 92 $\frac{1}{2}$   | 92 $\frac{1}{4}$   | 92 $\frac{1}{2}$   | 93 $\frac{3}{4}$   | 95                 | 95 $\frac{3}{8}$   | 95 $\frac{3}{16}$   | 97 $\frac{1}{2}$   | 98 $\frac{3}{8}$   | 100                | 100 $\frac{1}{2}$   | 101 $\frac{3}{16}$  | 101                 | 99 $\frac{3}{8}$   | 100 $\frac{1}{4}$  | {<br>Average for<br>the Year. |



AVERAGE MINIMUM RATE PER CENT OF DISCOUNT CHARGED BY THE BANK OF ENGLAND, IN EACH MONTH IN EACH  
YEAR FROM 1872 TO 1886.

| MONTHS.                   | 1872. | 1873. | 1874. | 1875. | 1876. | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. | 1885. | 1886. | MONTHS.                       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|
| January....               | 3     | 4½    | 3¾    | 4½    | 4⅝    | 2     | 3½    | 4½    | 3     | 3⅞    | 5⅞    | 4¾    | 3     | 5     | 3¾    | January.                      |
| February...               | 3     | 3½    | 3½    | 3⅝    | 4     | 2     | 2     | 3     | 3     | 3½    | 5⅞    | 3¾    | 3½    | 5     | 2¾    | February.                     |
| March.....                | 3     | 3½    | 3½    | 3½    | 3⅞    | 2     | 2½    | 2⅝    | 3     | 3     | 4     | 3     | 3⅞    | 3⅞    | 2     | March.                        |
| April .....               | 3¾    | 4     | 3½    | 3½    | 2⅞    | 2     | 3     | 2½    | 3     | 3     | 3     | 3     | 2½    | 3½    | 2     | April.                        |
| May.....                  | 4⅝    | 5½    | 4     | 3½    | 2     | 2⅞    | 3     | 2     | 3     | 2½    | 3     | 3⅞    | 2½    | 2⅞    | 2½    | May.                          |
| June.....                 | 3½    | 6½    | 2     | 3½    | 2     | 3     | 2½    | 2     | 2¾    | 2½    | 3     | 4     | 2½    | 2     | 2¾    | June.                         |
| July .....                | 3½    | 4⅞    | 3     | 3     | 2     | 2½    | 3½    | 2     | 2½    | 2½    | 3     | 4     | 2     | 2     | 2½    | July.                         |
| August.....               | 3½    | 3½    | 3⅝    | 2½    | 2     | 2⅞    | 4⅝    | 2     | 2½    | 2⅞    | 3⅞    | 4     | 2     | 2     | 2¾    | August.                       |
| September..               | 3¾    | 3½    | 3     | 2     | 2     | 3     | 5     | 2     | 2½    | 4     | 4⅞    | 3⅞    | 2     | 2     | 3½    | September.                    |
| October....               | 5⅝    | 6     | 3½    | 3⅝    | 2     | 4½    | 5½    | 2     | 2½    | 3⅞    | 5     | 3     | 2⅞    | 2     | 3¾    | October.                      |
| November..                | 6⅝    | 8½    | 4½    | 3½    | 2     | 4⅞    | 5⅝    | 2⅞    | 2½    | 5     | 5     | 3     | 4⅞    | 2⅞    | 4     | November.                     |
| December..                | 5⅝    | 5½    | 6     | 3     | 2     | 4     | 5     | 3     | 2⅞    | 5     | 5     | 3     | 5     | 3⅞    | 4½    | December.                     |
| Average for<br>the Year.. | 4½    | 4¾    | 3¾    | 3½    | 2⅝    | 2⅞    | 3¾    | 2⅝    | 2¾    | 3½    | 4½    | 3⅞    | 2⅞    | 3     | 3     | {<br>Average for<br>the Year. |

## INLAND REVENUE.

IN the following pages we give some interesting figures, taken from the Thirtieth Report of the Commissioners of Inland Revenue. As this is one of the great collecting departments, dealing with a variety of articles, we are able to see how a large portion of the revenue of the country is obtained. The total net Inland Revenue realised for the year ending March 31st, 1887, was £56,123,760, which, on comparison with the receipts for 1886, show an increase in the aggregate of £943,339, or 1·71 per cent. The receipts are divided under five chief heads for the convenience of comparison, as will be seen on reference to the following Table:—

*COMPARISON of the NET RECEIPTS of INLAND REVENUE for the  
Years ending March 31st, 1886 and 1887.*

|                       | YEAR ENDED 31ST MARCH. |            | Increase. | Decrease. |
|-----------------------|------------------------|------------|-----------|-----------|
|                       | 1886.                  | 1887.      |           |           |
|                       | £                      | £          | £         | £         |
| Excise .....          | 25,441,922             | 25,212,883 | ....      | 229,039   |
| Stamps .....          | 11,600,614             | 11,780,333 | 179,719   | ....      |
| Land Tax .....        | 1,023,196              | 1,065,359  | 42,163    | ....      |
| Inhabited House Duty. | 1,867,377              | 1,954,011  | 86,634    | ....      |
| Income Tax .....      | 15,247,312             | 16,111,174 | 863,862   | ....      |
|                       | 55,180,421             | 56,123,760 | 943,339   | ....      |

From the above it will be observed that the only branch in which a decrease is shown is under the head of Excise, and this is accounted for by reason of the falling off in the production of home-made spirits. In foreign spirits, however, there has been a considerable increase. The quantity of spirits charged with duty in the United Kingdom for 1887 was 26,935,873 gallons, against 27,551,982 gallons in 1886, or a decrease of 616,109 gallons; the duty realised being £13,140,695 in 1886 and £12,852,767 in 1887, or a decrease of £287,928. The decrease is most marked in England, being 626,557 gallons, and in Scotland 175,781 gallons, whilst in Ireland there was an increase of 210,616 gallons. The consumption of spirits per head of the population of the United Kingdom for 1886 was ·702 of a gallon; this is lower than it has been since 1869, when it stood at ·694 of a gallon. Illicit distillation for 1887 does not compare favourably with the previous year; for, whilst in 1886 there were in the United Kingdom 887 detections made, in 1887 there were 1,212, or an increase of 325. The increases were two in England, one in Scotland, and 322 in Ireland. The great increase in Ireland is partially attributed to the unsettled condition of the country, and in a great measure to the low prices of grain (especially barley), and to the straitened circumstances of the small farmers and labourers consequent thereon. It does not appear, however, that these illicit distilleries in Ireland have greatly interfered with the ordinary trade of the country, seeing that it is the only portion of the British Islands registering an increase in duty paid on spirits.



STATEMENT showing the TOTAL QUANTITIES of BRITISH, FOREIGN, AND COLONIAL SPIRITS, FOREIGN WINES, BEER, TEA, COFFEE, and COCOA, RETAINED for HOME CONSUMPTION in the Years ended 31st December, 1852, 1862, 1872, 1882, 1885, and 1886; and the QUANTITY of EACH CONSUMED per HEAD of the POPULATION:—

| CONSUMPTION OF            |                  |                   |                               |                   |                                           |                |                   |            |                   |             |                  |            |                  |            |                  |                           | Year ended 31st December. |
|---------------------------|------------------|-------------------|-------------------------------|-------------------|-------------------------------------------|----------------|-------------------|------------|-------------------|-------------|------------------|------------|------------------|------------|------------------|---------------------------|---------------------------|
| Year ended 31st December. | BRITISH SPIRITS. |                   | FOREIGN AND COLONIAL SPIRITS. |                   | Gallons per Head of Spirits of all kinds. | FOREIGN WINES. |                   | BEER.      |                   | TEA.        |                  | COFFEE.    |                  | COCOA.     |                  | Year ended 31st December. |                           |
|                           | Gallons.         | Gallons per Head. | Gallons.                      | Gallons per Head. |                                           | Gallons.       | Gallons per Head. | Barrels.   | Barrels per Head. | Pounds.     | Pounds per Head. | Pounds.    | Pounds per Head. | Pounds.    | Pounds per Head. |                           |                           |
| 1852                      | 25,200,879       | ·918              | 4,866,259                     | ·177              | 1·095                                     | 6,346,061      | ·231              | 16,732,454 | ·610              | 54,713,034  | 1·993            | 34,978,432 | 1·274            | 3,323,528  | ·121             | 1852                      |                           |
| 1862                      | 18,836,187       | ·644              | 5,193,641                     | ·177              | ·821                                      | 9,764,155      | ·334              | 19,327,191 | ·661              | 78,793,977  | 2·694            | 34,451,766 | 1·178            | 3,622,433  | ·124             | 1862                      |                           |
| 1872                      | 26,872,183       | ·943              | 9,068,329                     | ·285              | 1·128                                     | 16,765,444     | ·526              | 28,171,661 | ·884              | 127,661,360 | 4·005            | 31,173,555 | ·978             | 7,791,763  | ·244             | 1872                      |                           |
| 1882                      | 28,554,264       | ·809              | 8,338,578                     | ·236              | 1·045                                     | 14,339,070     | ·406              | 27,023,616 | ·766              | 164,953,230 | 4·673            | 31,214,553 | ·884             | 11,923,549 | ·333             | 1882                      |                           |
| 1885                      | 26,609,488       | ·732              | 8,012,656                     | ·221              | ·953                                      | 13,767,928     | ·379              | 27,101,238 | ·746              | 182,408,880 | 5·021            | 32,660,320 | ·899             | 14,603,067 | ·402             | 1885                      |                           |
| 1886                      | 25,954,251       | ·707              | 8,634,531                     | ·235              | ·942                                      | 13,168,844     | ·359              | 27,134,114 | ·739              | 173,800,197 | 4·877            | 31,608,260 | ·861             | 15,151,480 | ·413             | 1886                      |                           |

## INLAND REVENUE.

The foregoing Table shows the difference in the consumption per head of the various beverages named therein, decennially from 1852 to 1882, and for the years ending March, 1885-6.

We observe with satisfaction the gradual decline in spirits which has taken place regularly since 1872. The decline is chiefly in spirits of British manufacture. Taking the consumption of beer, we note an increase in the year 1886 over that of 1852 of .129 of a barrel per head of the population, although compared with 1885 a slight decrease is noticeable.

We turn, however, to the column relating to Tea for a marked advance in consumption, for whilst in 1852 we only consumed 54,713,034 lbs., or an average of 1.993 per head, in 1886 we retained for home consumption the enormous quantity of 178,800,197 lbs., or 4.877 lbs. per head.

We subjoin a table taken from the Thirtieth Report of the Commissioners of Her Majesty's Customs for the year ending March 31st, showing the sources from which our Tea was received during the year :—

| Country.             | 1876.       | 1886.       | PROPORTION FROM EACH COUNTRY IN |           |
|----------------------|-------------|-------------|---------------------------------|-----------|
|                      |             |             | 1876.                           | 1886.     |
|                      | lbs.        | lbs.        | Per Cent.                       | Per Cent. |
| Holland .....        | 1,451,244   | 1,758,787   | .78                             | .76       |
| China and Hong Kong. | 155,907,582 | 145,308,298 | 84.03                           | 62.99     |
| India .....          | 27,814,214  | 73,466,795  | 14.99                           | 31.85     |
| Ceylon.....          | 91,887      | 7,144,313   | .05                             | 1.30      |
| Other Countries..... | 271,444     | * 2,991,099 | .15                             | 1.30      |
|                      | 185,536,371 | 230,669,292 | 100.00                          | 100.00    |

We cannot help being struck with the marked increase in the Imports from India, amounting to 164 per cent, exclusive of Ceylon. The Teas from India being stronger than those from China, a smaller quantity will go further, thus the Revenue is of necessity affected thereby; but, seeing that the public get the benefit, we do not look upon the fact in the same light that our Customs Commissioners would do. We are all the more pleased with the increase because it is with our great Indian Possessions, and we trust that it may be satisfactorily maintained for the benefit of our own people, and also for the inhabitants of our Indian Empire.

Coffee shows a gradual decline, whilst Cocoa shows a correspondingly small increase.

The item in the receipts of Inland Revenue referring to Stamps shows an increase of £179,719. The principal increases and decreases are as follows :—A decrease of £77,175 is shown for Probate Inventory and Account Duty, £43,478 for Succession Duty, whilst for Legacy Duty an increase is noted of £86,003. Deeds and other

\* Principally from Java.



## INLAND REVENUE.

instruments account for an increase of £205,885, whilst Bills of Exchange and Promissory Notes produced £11,955 less in 1887 than in the previous year. Receipt Draft and Inland Revenue Stamps show an increase of £15,311.

The increase in the amount collected for Land Tax in 1886 and 1887, as compared with previous years, arises from an earlier collection of the tax. We give below the number of contracts entered into for the Redemption of the Land Tax, and the amount of Land Tax redeemed for the last six years:—

| Year.      | Number of Contracts. | Amount of Land Tax Redeemed. |
|------------|----------------------|------------------------------|
| 1881 ..... | 1,455 .....          | £2,322                       |
| 1882 ..... | 1,407 .....          | 2,910                        |
| 1883 ..... | 1,600 .....          | 4,305                        |
| 1884 ..... | 1,628 .....          | 3,013                        |
| 1885 ..... | 1,433 .....          | 2,720                        |
| 1886 ..... | 1,282 .....          | 2,395                        |

The total amount extinguished under the Land Tax Redemption Act is now £861,594.

The increase in the amount of Inhabited House Duty is £86,634, and is due in part to the new valuation of property in districts outside the Metropolitan area in 1885-6, and an earlier collection of the duty in 1886-7. The number of shops or warehouses on which duty was charged in 1886 was 248,864; beerhouses, 84,576; farmhouses, 32,431; dwelling-houses, 838,692; or a total of 1,204,563, being an increase of 28,176 over 1885.

We now come to the increase in the Income Tax, which is £863,862, and is made up as follows:—

|                                                         |          |
|---------------------------------------------------------|----------|
| Schedule A On Lands, Messuages, &c. ....                | £409,398 |
| „ B On Lands .....                                      | 15,222   |
| „ C On Dividends, Government and Municipal Stocks, &c.. | 74,380   |
| „ D On Profits, Trades, Professions, &c. ....           | 297,871  |
| „ E On Salaries, &c. ....                               | 66,991   |

£863,862

The gross annual value of lands assessed for 1885-6 shows a decrease on the assessments for 1884-5 of £1,770,478, being a decrease of 3·36 per cent in England, 1·89 per cent in Scotland, and 0·28 per cent in Ireland. Below we give the principal decreases in the value of lands in England, as now ascertained, in each county:—

|                 |          |                         |         |
|-----------------|----------|-------------------------|---------|
| Lincoln .....   | £218,000 | Northumberland .....    | £53,000 |
| York .....      | 180,000  | Northampton .....       | 53,000  |
| Essex .....     | 139,000  | Nottingham .....        | 52,000  |
| Suffolk .....   | 78,000   | Gloucester .....        | 51,000  |
| Norfolk .....   | 69,000   | Somerset .....          | 48,000  |
| Wilts .....     | 64,000   | Kent (ext. Metrop.).... | 46,000  |
| Leicester ..... | 55,000   | Oxford .....            | 43,000  |

## INLAND REVENUE.

We find that the gross assessments in annual value of lands (United Kingdom) assessed under Schedule A were at their highest in 1879-80.

|                                                                |             |
|----------------------------------------------------------------|-------------|
| They then amounted to .....                                    | £69,548,796 |
| In the year 1885-6 this has declined on the new valuation to.. | 63,268,679  |

|                |            |
|----------------|------------|
| Decrease ..... | £6,280,117 |
|----------------|------------|

|                                                                                                                                                                                                                       |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| To this should be added the capital value of the tax ultimately discharged from the assessment on the ground of agricultural distress, or actually repaid in money, in respect of the year 1885-6, amounting to ..... | 732,000 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|

|                      |            |
|----------------------|------------|
| Total decrease ..... | £7,012,117 |
|----------------------|------------|

From 1879-80 up to 1884-5 the assessments under Schedule D recorded a continued growth, but in the year 1885-6 there was a decline under this schedule to the extent of £3,101,133, being the first since 1879-80.

Included in the report we are now quoting from, is a report by the Principal of the Laboratory, who states that 27,644 samples of food have been analysed during the year, or 1,469 more than in the previous year. Under the Sale of Food and Drugs Act, the magistrates referred forty-five samples to the department, comprising milk, pepper, butter, bread, coffee, whisky, and ale. In twenty-four cases the conclusions of the local analyst were confirmed, but in twenty-one cases the analysis did not sustain the charge. Out of eleven samples of pepper, eight were alleged to contain ground rice, but in no case was the article present; and eight were genuine samples. Of three samples of butter, one was alleged to contain 60 per cent of foreign fat, and two an excess of salt and water; the former was found to be genuine, and the latter to contain no more water and salt than are often met with in genuine dairy butters. Two samples of bread, certified as containing alum, afforded no evidence of the presence of that compound; but in two cases of samples of coffee, alleged to contain chicory, the report of the public analyst was confirmed. Taking the whole of the cases submitted, we find that only half of them were confirmed by the department before mentioned, which does not reflect very great credit on the local analysts concerned.

The number of prosecutions in which scientific evidence from the Customs and Inland Revenue Department has been required amounted to 370, and penalties were imposed amounting in the aggregate to the large sum of £9,008, principally from the analyses of samples of beer taken from publicans, which afforded evidence of having been diluted with water or addition of sugar. We note a case taken up by the Excise, before the Deputy-Recorder of Nottingham, where the respondent was charged with selling a botanic beer without an Excise license for the sale of beer. The liquor was made from sugar, herbs, and water, and proved on analysis to contain 5 per cent of proof spirit.



## INLAND REVENUE.

One hundred and forty-three samples of tobacco have been analysed, and in fifty-three cases the article was not conformable to law. Below we give a table showing the consumption of tobacco in proportion to population:—

*TABLE showing the CONSUMPTION of TOBACCO in Proportion to the Population.*

| Year ended 31st March. | Total Population of Great Britain and Ireland. | Pounds Weight of Tobacco cleared for Consumption. |                         |
|------------------------|------------------------------------------------|---------------------------------------------------|-------------------------|
|                        |                                                | In the United Kingdom.                            | Per Head of Population. |
|                        |                                                |                                                   | lbs. oz.                |
| 1841.....              | 26,700,000                                     | 23,096,281                                        | 0 13 $\frac{3}{4}$      |
| 1851.....              | 27,347,000                                     | 27,734,786                                        | 1 0 $\frac{1}{4}$       |
| 1861.....              | 28,887,000                                     | 35,413,846                                        | 1 3 $\frac{1}{2}$       |
| 1871.....              | 31,724,000                                     | 42,656,658                                        | 1 5 $\frac{1}{2}$       |
| 1881.....              | 35,192,000                                     | 50,379,425                                        | 1 6 $\frac{7}{8}$       |
| 1884.....              | 35,867,000                                     | 51,177,362                                        | 1 6 $\frac{3}{4}$       |
| 1885.....              | 36,231,000                                     | 52,803,237                                        | 1 7 $\frac{1}{2}$       |
| 1886.....              | 36,612,000                                     | 52,752,728                                        | 1 7                     |
| 1887.....              | 36,995,000                                     | 53,177,433                                        | 1 7                     |

The amount of Tobacco cleared for consumption is 424,705 lbs. more than in the previous year; but from the Table it will be seen that since 1881, when the trade must have settled down to the higher rate of duty imposed in 1878, the increase in the consumption has barely kept pace with the growth of the population.

It would, however, appear from the foregoing table that there is still great scope for the Anti-tobacco Society, seeing that the consumption has risen from 13 $\frac{3}{4}$ oz. in 1841 to 1lb. 7oz. per head in 1887.

## BURTHENS ON LAND.

NEW SCALE OF LAW COSTS ON THE SALE, PURCHASE, OR MORTGAGE OF  
REAL PROPERTY, HOUSES, OR LAND.

|                                                                                                                                                                                                         | For the<br>1st £1,000. | For the<br>2nd and<br>3rd £1,000. | For the 4th<br>and each<br>subsequent<br>£1,000 up to<br>£10,000.* | For each<br>subsequ'ent<br>£1,000<br>up to<br>£100,000.* |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------|--------------------------------------------------------------------|----------------------------------------------------------|
|                                                                                                                                                                                                         | Per £100.<br>£ s. d.   | Per £100.<br>£ s. d.              | Per £100.<br>£ s. d.                                               | Per £100.<br>£ s. d.                                     |
| Vendor's solicitor for negotiating a sale of<br>property by private contract .....                                                                                                                      | 1 0 0                  | 1 0 0                             | 0 10 0                                                             | 0 5 0                                                    |
| Do., do., for conducting a sale of property<br>by public auction, including the condi-<br>tions of sale—                                                                                                |                        |                                   |                                                                    |                                                          |
| When the property is sold .....                                                                                                                                                                         | 1 0 0                  | 0 10 0                            | 0 5 0                                                              | 0 2 6                                                    |
| When the property is not sold, then on<br>the reserved price † .....                                                                                                                                    | 0 10 0                 | 0 5 0                             | 0 2 6                                                              | 0 1 3                                                    |
| Do., do., for deducing title to freehold,<br>copyhold, or leasehold property, and<br>perusing, and completing conveyance<br>(including preparation of contract, or<br>conditions of sale, if any) ..... | 1 10 0                 | 1 0 0                             | 0 10 0                                                             | 0 5 0                                                    |
| Purchaser's solicitor for negotiating a pur-<br>chase of property by private contract ..                                                                                                                | 1 0 0                  | 1 0 0                             | 0 10 0                                                             | 0 5 0                                                    |
| Do., do., for investigating title to freehold,<br>copyhold, or leasehold property, and<br>preparing and completing conveyance<br>(including perusal and completion of<br>contract, if any) .....        | 1 10 0                 | 1 0 0                             | 0 10 0                                                             | 0 5 0                                                    |
| Mortgagor's solicitor for deducing title to<br>freehold, copyhold, or leasehold property,<br>perusing mortgage, and completing ....                                                                     | 1 10 0                 | 1 0 0                             | 0 10 0                                                             | 0 5 0                                                    |
| Mortgagee's solicitor for negotiating loan ..                                                                                                                                                           | 1 0 0                  | 1 0 0                             | 0 5 0                                                              | 0 2 6                                                    |
| Do., do., for investigating title to freehold,<br>copyhold, or leasehold property; and<br>preparing and completing mortgage....                                                                         | 1 10 0                 | 1 0 0                             | 0 10 0                                                             | 0 5 0                                                    |
| Vendor's or mortgagor's solicitor for pro-<br>curing execution and acknowledgment of<br>deed by a married woman .....                                                                                   | 2 10 0                 | extra.                            |                                                                    |                                                          |

\* Every transaction exceeding £100,000 to be charged for as if it were for £100,000.

† A minimum charge of £5 to be made whether a sale is effected or not.



## BUILDING SOCIETIES.

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THE following summary statement relating to building societies is taken from the Official Return for 1886.

In making a comparison for England and Wales in the aggregate, we have taken the returns for 1882, as compared with the one just issued. By so doing, we shall be better able to note the progress of these societies than if we confined our review to a comparison of 1886 with the previous year.

In the year ending 1882 there were 1,687 building societies in England and Wales who made returns, 1,403 of which returned 493,271 members, or an average of 352 for each society. The transactions for the year, as indicated by the receipts, were £20,919,473, or an average of £13,745 per society. The number of societies making returns of liabilities and assets during the same year were 1,528, and their liabilities to holders of shares were £29,331,245, to depositors and other creditors £16,351,611; whilst the assets of the same societies invested on mortgage security were returned at £44,587,718, and the investments in other securities and cash, £2,605,727, or a total of £47,193,445, against a total liability of £45,682,856. In 1886 the number of societies making returns was 2,185. 1,779 of these societies returned a membership of 563,730, or an average of 317 members per society. 1,976 societies returned their receipts at £19,803,966, or an average of £10,022 per society. The number of societies making returns of liabilities and assets were 1,992, and their liability was as follows:—To holders of shares, £33,929,716; to depositors and other creditors, £15,272,075; whilst the assets were—invested on mortgage, £47,244,867; invested in cash and other securities, £3,632,344; or a total of £50,877,211, against a total liability of £49,201,791. It will be seen that the increase in societies in the period named is 257, the increase in membership 70,459, or a decrease of 35 per society. Turning to the receipts for this increased number of societies we find that the amount is less by £115,507, or £3,723 per society. On comparing the liabilities and assets we observe that in 1882 the total assets indicated a surplus over liabilities of £1,510,589; whilst these accounts for 1886 show a surplus of £1,675,420. We naturally infer that the position of building societies is almost stationary, which is doubtless an indication that the same amount of confidence is not displayed in them as was formerly manifested by investors. The number of societies in 1882 showing deficits was 266, returning £57,353, against 435 in 1886 returning deficits amounting to £151,639. These figures show that in 1882 the average deficit of each society was £214, whilst in 1886 it had risen to £349 per society. The highest average of membership is in Cumberland, where seven societies, consisting of 6,681 members, give an average of 954; but the highest average receipts per society is in Yorkshire, with £27,241. The highest amount received in any one county is, however, in Middlesex, which leads the way very considerably, the amount being no less than £6,395,903.

## BUILDING SOCIETIES—GENERAL SUMMARY, 1886.

| COUNTIES.              | Total<br>Number<br>of<br>Societies. | Societies<br>Dis-<br>solved,<br>&c. | Number of Members<br>(where stated). |                       |          | Total Receipts during the last<br>Financial Year. |                        |          |
|------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-----------------------|----------|---------------------------------------------------|------------------------|----------|
|                        |                                     |                                     | Number of<br>Societies.              | Number of<br>Members. | Average. | Number of<br>Societies.                           | Amount of<br>Receipts. | Average. |
|                        |                                     |                                     |                                      |                       |          |                                                   | £                      | £        |
| ENGLAND.               |                                     |                                     |                                      |                       |          |                                                   |                        |          |
| Bedfordshire .....     | 10                                  | ..                                  | 9                                    | 2,027                 | 225      | 10                                                | 20,447                 | 2,045    |
| Berkshire .....        | 12                                  | ..                                  | 8                                    | 2,327                 | 291      | 11                                                | 23,516                 | 2,138    |
| Buckinghamshire .....  | 8                                   | 1                                   | 7                                    | 1,428                 | 204      | 7                                                 | 25,935                 | 3,705    |
| Cambridgeshire .....   | 8                                   | ..                                  | 8                                    | 977                   | 122      | 8                                                 | 20,854                 | 2,607    |
| Cheshire .....         | 46                                  | 1                                   | 38                                   | 8,418                 | 222      | 39                                                | 121,660                | 3,119    |
| Cornwall .....         | 7                                   | ..                                  | 7                                    | 1,189                 | 170      | 7                                                 | 3,907                  | 558      |
| Cumberland .....       | 7                                   | ..                                  | 7                                    | 6,681                 | 954      | 7                                                 | 105,937                | 15,134   |
| Derbyshire .....       | 12                                  | ..                                  | 9                                    | 2,301                 | 256      | 10                                                | 19,029                 | 1,903    |
| Devonshire .....       | 32                                  | 1                                   | 24                                   | 11,025                | 459      | 26                                                | 116,710                | 4,489    |
| Dorset .....           | 10                                  | ..                                  | 8                                    | 2,569                 | 321      | 10                                                | 59,748                 | 5,975    |
| Durham .....           | 91                                  | ..                                  | 81                                   | 28,526                | 352      | 88                                                | 892,143                | 10,138   |
| Essex .....            | 58                                  | 4                                   | 44                                   | 8,827                 | 201      | 49                                                | 132,510                | 2,704    |
| Gloucestershire .....  | 28                                  | ..                                  | 22                                   | 9,635                 | 438      | 28                                                | 535,081                | 19,110   |
| Hampshire .....        | 45                                  | 1                                   | 38                                   | 13,193                | 347      | 41                                                | 727,523                | 17,745   |
| Herefordshire .....    | 6                                   | ..                                  | 6                                    | 1,915                 | 319      | 6                                                 | 9,462                  | 1,577    |
| Hertfordshire .....    | 16                                  | ..                                  | 15                                   | 2,630                 | 175      | 16                                                | 56,121                 | 3,508    |
| Huntingdonshire .....  | 1                                   | ..                                  | 1                                    | 394                   | 394      | 1                                                 | 698                    | 698      |
| Kent .....             | 91                                  | 1                                   | 84                                   | 30,092                | 358      | 84                                                | 1,221,544              | 14,543   |
| Lancashire .....       | 425                                 | 15                                  | 353                                  | 88,995                | 238      | 384                                               | 2,444,037              | 6,365    |
| Leicestershire .....   | 19                                  | ..                                  | 19                                   | 9,006                 | 495      | 19                                                | 204,542                | 10,765   |
| Lincolnshire .....     | 25                                  | 1                                   | 22                                   | 5,519                 | 251      | 22                                                | 134,713                | 6,123    |
| Middlesex .....        | 552                                 | 22                                  | 413                                  | 130,336               | 337      | 503                                               | 6,395,903              | 12,715   |
| Monmouthshire .....    | 15                                  | ..                                  | 13                                   | 3,548                 | 273      | 14                                                | 54,674                 | 3,905    |
| Norfolk .....          | 16                                  | ..                                  | 11                                   | 2,574                 | 234      | 14                                                | 50,817                 | 3,630    |
| Northamptonshire ..... | 11                                  | 1                                   | 8                                    | 1,972                 | 246      | 10                                                | 12,755                 | 1,275    |
| Northumberland .....   | 56                                  | ..                                  | 49                                   | 11,871                | 242      | 54                                                | 1,203,878              | 22,714   |



|                               |       |    |       |         |     |       |            |        |
|-------------------------------|-------|----|-------|---------|-----|-------|------------|--------|
| Nottinghamshire .....         | 22    | 1  | 14    | 6,305   | 450 | 17    | 145,780    | 8,575  |
| Oxfordshire .....             | 1     | .. | 1     | 385     | 385 | 1     | 1,923      | 1,923  |
| Rutlandshire .....            | 2     | .. | 2     | 209     | 104 | 2     | 1,109      | 554    |
| Shropshire .....              | 8     | .. | 5     | 794     | 159 | 6     | 9,941      | 1,657  |
| Somersetshire .....           | 26    | .. | 25    | 11,211  | 448 | 25    | 181,810    | 7,272  |
| Staffordshire .....           | 47    | 2  | 37    | 14,235  | 385 | 42    | 323,277    | 7,697  |
| Suffolk .....                 | 8     | 1  | 7     | 1,473   | 210 | 7     | 40,523     | 5,789  |
| Surrey .....                  | 154   | 9  | 123   | 29,568  | 240 | 141   | 460,118    | 3,263  |
| Sussex .....                  | 43    | 1  | 37    | 7,899   | 214 | 40    | 199,909    | 4,998  |
| Warwickshire .....            | 21    | 2  | 19    | 11,374  | 599 | 17    | 260,644    | 15,332 |
| Westmoreland .....            | 6     | .. | 5     | 1,149   | 230 | 5     | 26,059     | 5,212  |
| Wiltshire .....               | 6     | .. | 6     | 2,171   | 362 | 6     | 43,604     | 7,267  |
| Worcestershire .....          | 13    | .. | 11    | 4,206   | 382 | 11    | 62,559     | 5,687  |
| Yorkshire .....               | 122   | 2  | 97    | 59,533  | 614 | 107   | 2,914,780  | 27,241 |
| Total England .....           | 2,086 | 67 | 1,693 | 542,487 | 320 | 1,895 | 19,266,180 | 10,168 |
| WALES.                        |       |    |       |         |     |       |            |        |
| Anglesey .....                | 1     | .. | 1     | 247     | 247 | 1     | 3,285      | 3,285  |
| Brecon .....                  | 1     | .. | 1     | 350     | 350 | 1     | 882        | 882    |
| Carmarthenshire .....         | 8     | .. | 7     | 1,651   | 236 | 8     | 17,640     | 2,205  |
| Carnarvonshire .....          | 8     | .. | 7     | 2,854   | 408 | 7     | 47,929     | 6,847  |
| Flint .....                   | 1     | .. | ..    | ..      | ..  | ..    | ..         | ..     |
| Glamorganshire .....          | 77    | 1  | 68    | 15,254  | 224 | 61    | 451,910    | 7,409  |
| Merionethshire .....          | 1     | .. | ..    | ..      | ..  | 1     | 3,764      | 3,764  |
| Montgomeryshire .....         | 1     | .. | 1     | 31      | 31  | 1     | 143        | 143    |
| Pembrokeshire .....           | 1     | .. | 1     | 856     | 856 | 1     | 12,233     | 12,233 |
| Total Wales .....             | 99    | 1  | 86    | 21,243  | 247 | 81    | 537,786    | 6,639  |
| Total England and Wales ..... | 2,185 | 68 | 1,779 | 563,730 | 317 | 1,976 | 19,803,966 | 10,022 |
| Total Scotland .....          | 52    | 6  | 29    | 6,503   | 224 | 45    | 343,202    | 7,627  |
| Total Ireland .....           | 44    | .. | 38    | 11,448  | 301 | 41    | 552,675    | 13,480 |
| Total .....                   | 2,281 | 74 | 1,846 | 581,681 | 315 | 2,062 | 20,699,843 | 10,039 |

# BUILDING SOCIETIES—GENERAL SUMMARY, 1886.

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| COUNTIES.             | Number of Societies making Return of Liabilities and Assets. | Liabilities.              |                                    | Balance of Unappropriated Profit. |         | Balance Deficit.     |         | Assets.                                                                  |                                                |               |
|-----------------------|--------------------------------------------------------------|---------------------------|------------------------------------|-----------------------------------|---------|----------------------|---------|--------------------------------------------------------------------------|------------------------------------------------|---------------|
|                       |                                                              | To the Holders of Shares. | To Depositors and other Creditors. | Number of Societies.              | Amount. | Number of Societies. | Amount. | Balance due on Mortgage Securities (not including prospective Interest). | Amount Invested in other Securities, and Cash. | Total Assets. |
|                       |                                                              | £                         | £                                  |                                   | £       |                      | £       | £                                                                        | £                                              | £             |
| ENGLAND.              |                                                              |                           |                                    |                                   |         |                      |         |                                                                          |                                                |               |
| Bedfordshire.....     | 10                                                           | 44,821                    | 3,931                              | 9                                 | 2,201   | ..                   | ..      | 48,456                                                                   | 2,497                                          | 50,953        |
| Berkshire.....        | 11                                                           | 52,757                    | 6,713                              | 9                                 | 2,726   | 2                    | 45      | 59,430                                                                   | 2,721                                          | 62,151        |
| Buckinghamshire.....  | 7                                                            | 39,314                    | 19,123                             | 6                                 | 1,632   | 1                    | 27      | 59,299                                                                   | 743                                            | 60,042        |
| Cambridgeshire.....   | 8                                                            | 35,356                    | 8,059                              | 6                                 | 1,117   | 2                    | 137     | 37,297                                                                   | 7,098                                          | 44,395        |
| Cheshire.....         | 40                                                           | 203,588                   | 85,602                             | 34                                | 12,443  | 5                    | 147     | 286,691                                                                  | 14,795                                         | 301,486       |
| Cornwall.....         | 7                                                            | 7,972                     | 92                                 | 2                                 | 184     | 5                    | 195     | 5,613                                                                    | 2,440                                          | 8,053         |
| Cumberland.....       | 7                                                            | 307,790                   | 177,026                            | 7                                 | 10,945  | ..                   | ..      | 475,827                                                                  | 19,934                                         | 495,761       |
| Derbyshire.....       | 10                                                           | 45,727                    | 9,853                              | 7                                 | 609     | 2                    | 37      | 52,939                                                                   | 3,213                                          | 56,152        |
| Devonshire.....       | 26                                                           | 213,524                   | 70,090                             | 21                                | 14,096  | 5                    | 331     | 265,651                                                                  | 31,728                                         | 297,379       |
| Dorset.....           | 10                                                           | 82,533                    | 88,009                             | 7                                 | 7,712   | 3                    | 103     | 171,889                                                                  | 6,262                                          | 178,151       |
| Durham.....           | 91                                                           | 1,826,709                 | 452,472                            | 69                                | 99,433  | 21                   | 39,489  | 2,069,238                                                                | 269,887                                        | 2,339,125     |
| Essex.....            | 49                                                           | 295,927                   | 53,469                             | 38                                | 19,265  | 11                   | 1,330   | 342,968                                                                  | 24,363                                         | 367,331       |
| Gloucestershire.....  | 28                                                           | 533,335                   | 434,164                            | 26                                | 59,461  | 2                    | 59      | 929,206                                                                  | 97,695                                         | 1,026,901     |
| Hampshire.....        | 41                                                           | 458,654                   | 470,496                            | 35                                | 28,542  | 6                    | 271     | 876,515                                                                  | 80,906                                         | 957,421       |
| Herefordshire.....    | 6                                                            | 24,264                    | 611                                | 4                                 | 602     | 1                    | 53      | 22,776                                                                   | 2,648                                          | 25,424        |
| Hertfordshire.....    | 16                                                           | 79,616                    | 30,313                             | 11                                | 2,058   | 1                    | 6       | 96,379                                                                   | 15,602                                         | 111,981       |
| Huntingdonshire.....  | 1                                                            | 575                       | ..                                 | ..                                | ..      | ..                   | ..      | 248                                                                      | 327                                            | 575           |
| Kent.....             | 84                                                           | 1,414,645                 | 1,131,974                          | 63                                | 92,576  | 20                   | 3,465   | 2,492,480                                                                | 143,250                                        | 2,635,730     |
| Lancashire.....       | 389                                                          | 5,343,565                 | 2,809,163                          | 322                               | 389,657 | 52                   | 30,767  | 7,782,059                                                                | 729,559                                        | 8,511,618     |
| Leicestershire.....   | 18                                                           | 369,272                   | 85,008                             | 15                                | 9,360   | 2                    | 93      | 447,893                                                                  | 6,654                                          | 454,547       |
| Lincolnshire.....     | 22                                                           | 194,942                   | 16,392                             | 16                                | 4,580   | 2                    | 18      | 207,598                                                                  | 8,298                                          | 215,896       |
| Middlesex.....        | 501                                                          | 11,087,003                | 3,573,508                          | 339                               | 480,990 | 150                  | 49,313  | 13,999,174                                                               | 1,093,014                                      | 15,092,188    |
| Monmouthshire.....    | 13                                                           | 56,009                    | 43,926                             | 10                                | 10,182  | 3                    | 2,769   | 98,035                                                                   | 9,313                                          | 107,348       |
| Norfolk.....          | 14                                                           | 114,776                   | 17,224                             | 11                                | 4,864   | 2                    | 17      | 127,949                                                                  | 8,898                                          | 136,847       |
| Northamptonshire..... | 10                                                           | 30,625                    | 6,379                              | 7                                 | 1,034   | 2                    | 30      | 36,906                                                                   | 1,102                                          | 38,008        |
| Northumberland.....   | 54                                                           | 3,408,748                 | 147,057                            | 50                                | 121,208 | 2                    | 67      | 3,595,473                                                                | 81,473                                         | 3,676,946     |



|                       |       |            |            |       |           |     |         |            |           |            |
|-----------------------|-------|------------|------------|-------|-----------|-----|---------|------------|-----------|------------|
| Nottinghamshire ..... | 17    | 333,037    | 51,225     | 14    | 21,925    | 3   | 162     | 392,082    | 13,943    | 406,025    |
| Oxfordshire .....     | 1     | 2,942      | ..         | 1     | 101       | ..  | ..      | 2,942      | 101       | 3,043      |
| Rutlandshire .....    | 2     | 1,330      | ..         | 1     | 2         | 1   | 3       | 998        | 360       | 1,358      |
| Shropshire .....      | 6     | 14,819     | 6,082      | 5     | 1,316     | 1   | 3       | 17,719     | 4,495     | 22,214     |
| Somersetshire .....   | 25    | 283,319    | 157,764    | 16    | 25,872    | 8   | 486     | 431,066    | 35,403    | 466,469    |
| Staffordshire .....   | 42    | 687,123    | 243,292    | 32    | 79,702    | 9   | 601     | 972,026    | 37,490    | 1,009,516  |
| Suffolk .....         | 7     | 69,349     | 15,228     | 7     | 1,858     | ..  | ..      | 81,005     | 5,430     | 86,435     |
| Surrey .....          | 140   | 872,081    | 177,311    | 77    | 34,304    | 57  | 7,226   | 988,992    | 87,478    | 1,076,470  |
| Sussex .....          | 40    | 363,139    | 90,178     | 34    | 21,281    | 6   | 774     | 445,650    | 28,174    | 473,824    |
| Warwickshire .....    | 18    | 591,813    | 35,219     | 12    | 31,403    | 5   | 466     | 607,842    | 50,127    | 657,969    |
| Westmoreland .....    | 5     | 55,713     | 9,992      | 5     | 699       | ..  | ..      | 64,167     | 2,237     | 66,404     |
| Wiltshire .....       | 6     | 124,886    | 54,531     | 4     | 9,771     | 2   | 80      | 169,321    | 19,787    | 189,108    |
| Worcestershire .....  | 11    | 104,990    | 53,753     | 7     | 3,102     | 4   | 155     | 154,636    | 7,054     | 161,990    |
| Yorkshire .....       | 107   | 3,432,257  | 4,074,097  | 88    | 165,099   | 17  | 3,400   | 7,059,275  | 608,778   | 7,668,053  |
| Total England .....   | 1,900 | 33,199,845 | 14,709,355 | 1,427 | 1,773,912 | 415 | 142,125 | 45,975,710 | 3,565,277 | 49,540,987 |
| WALES.                |       |            |            |       |           |     |         |            |           |            |
| Anglesey .....        | 1     | 11,832     | ..         | 1     | 177       | ..  | ..      | 11,871     | 138       | 12,009     |
| Brecon .....          | 1     | 2,152      | ..         | 1     | 98        | ..  | ..      | 1,620      | 630       | 2,250      |
| Cardiff .....         | 7     | 23,571     | 12,466     | 6     | 2,240     | 1   | 229     | 33,661     | 4,387     | 38,048     |
| Carmarthenshire ..... | 8     | 149,643    | 13,173     | 6     | 9,582     | 2   | 1,016   | 165,884    | 5,498     | 171,382    |
| Flint .....           | ..    | ..         | ..         | ..    | ..        | ..  | ..      | ..         | ..        | ..         |
| Glamorganshire .....  | 72    | 498,551    | 535,901    | 53    | 40,267    | 16  | 8,255   | 1,014,264  | 52,200    | 1,066,464  |
| Merionethshire .....  | 1     | 11,805     | 1,176      | 1     | 761       | ..  | ..      | 13,202     | 540       | 13,742     |
| Montgomeryshire ..... | 1     | 129        | 4          | ..    | ..        | 1   | 14      | ..         | 119       | 119        |
| Pembrokeshire .....   | 1     | 32,188     | ..         | 1     | ..        | ..  | ..      | 28,655     | 3,555     | 32,210     |
| Total Wales .....     | 92    | 729,871    | 562,720    | 69    | 53,147    | 20  | 9,514   | 1,269,157  | 67,067    | 1,336,224  |
| Total Eng. and Wales  | 1,992 | 33,929,716 | 15,272,075 | 1,496 | 1,827,059 | 435 | 151,639 | 47,244,867 | 3,632,344 | 50,877,211 |
| Total Scotland .....  | 46    | 725,702    | 242,549    | 37    | 39,776    | 5   | 2,174   | 954,102    | 51,751    | 1,005,853  |
| Total Ireland .....   | 41    | 699,970    | 322,439    | 30    | 41,772    | 6   | 7,370   | 979,466    | 69,081    | 1,048,547  |
| Total .....           | 2,079 | 35,355,388 | 15,837,063 | 1,563 | 1,908,607 | 446 | 161,183 | 49,178,435 | 3,753,176 | 52,931,611 |

## THE DEATH DUTIES.

### PROBATE AND ACCOUNT DUTY.

This duty is now regulated by 44 Vict., cap. 12 (1881), and is payable on the Affidavits for Probate and Letters of Administration; and also on the accounts which have to be rendered in special cases of benefits accruing to anyone by reason of the death of another person.

The rates of duty are as follow:—

Under £100 no duty.

Where value exceeds £100 and not £500, £1 for each £50, or fraction of £50.

“ “ £500 “ £1,000, £1. 5s.

“ “ £1,000, £3 for each £100, or fraction of £100.”

Where the gross value of an estate does not exceed £300, a fixed duty of 30s. only is payable to cover all duties.

In the case of persons dying domiciled in the United Kingdom, debts and funeral expenses are deducted before calculating the duty.

### LEGACY AND SUCCESSION DUTIES.

Legacy duty is payable in respect of personal estate, and succession duty in respect of real estate.

Rates of duty are as follow:—

To children of the deceased, or their descendants; or to the father or mother or other lineal ancestor of the deceased .. £1 per cent.

To brothers and sisters of the deceased, or their descendants. £3 per cent.

To brothers and sisters of the father or mother of the deceased, or their descendants..... £5 per cent.

To brothers and sisters of the grandfather or grandmother of the deceased, or their descendants ..... £6 per cent.

To any person in any other degree of collateral consanguinity, or to a stranger in blood..... £10 per cent.

The husband or wife of deceased is exempt from duty.

If the husband or wife is a relative of the deceased, the duty on a legacy to either is calculated at the lower rate.

The legacy duty is payable on the capital value.

Succession duty is paid on the value of any annuity equal to the net income of the property, which annuity would continue during the life of the successor.

Where the whole personal estate does not exceed £300 no legacy duty is payable.

All pecuniary legacies, residues, or share of residue, although not of the amount of £20, are subject to duty.

In case of persons dying leaving issue, the probate duty covers all legacy duty which would formerly have been paid by such issue.

Where the principal value of the whole succession does not exceed £100, or when the value of the individual succession is less than £20, no succession duty is payable.

Persons domiciled in the United Kingdom pay legacy duty on all movable property wherever situate.

Persons domiciled abroad are altogether exempt from legacy duty on movable property.

By the Customs and Inland Revenue Act, 1885 (48 and 49 Vict., c. 51), a yearly duty of 5 per cent is to be levied upon the net annual value, income or profits, of the real and personal property of any body, corporate or incorporate. But there are a number of exemptions, the most important of which are:—Property belonging to the counties and certain other public bodies, charities, friendly societies, savings banks, and trading concerns.



# EXPECTATION OF LIFE.

EXPECTATION OF LIFE TABLES were constructed by the late Dr. Farr, of the General Register Office, and were calculated on the death-rates of 1838-54; but since that time very important changes have occurred in the death-rates at different ages; and consequently new tables have been constructed by Dr. W. Ogle, who succeeded Dr. Farr, on the basis of the death-rates of 1871-80. The following table gives the results both of the older and the later calculations; the first two columns in the male and female parts, respectively, giving the survivors at each year of life out of a million born of the corresponding sex, by the older and the newer calculation; and the two other columns giving similarly the expectation of life at each year.

| AGE.   | MALES.                                                                            |           |                                                     |          | FEMALES.                                                                          |           |                                                     |          | AGE.   |
|--------|-----------------------------------------------------------------------------------|-----------|-----------------------------------------------------|----------|-----------------------------------------------------------------------------------|-----------|-----------------------------------------------------|----------|--------|
|        | OF 1,000,000 BORN,<br>THE NUMBER SURVIVING<br>AT THE END OF EACH<br>YEAR OF LIFE. |           | MEAN<br>AFTER-LIFETIME<br>(EXPECTATION<br>OF LIFE). |          | OF 1,000,000 BORN,<br>THE NUMBER SURVIVING<br>AT THE END OF EACH<br>YEAR OF LIFE. |           | MEAN<br>AFTER-LIFETIME<br>(EXPECTATION<br>OF LIFE). |          |        |
|        | 1898-54.                                                                          | 1871-80.  | 1898-54.                                            | 1871-80. | 1898-54.                                                                          | 1871-80.  | 1898-54.                                            | 1871-80. |        |
| Col'mn | 1                                                                                 | 2         | 3                                                   | 4        | 5                                                                                 | 6         | 7                                                   | 8        | Col'mn |
| 0      | 1,000,000                                                                         | 1,000,000 | 39·91                                               | 41·35    | 1,000,000                                                                         | 1,000,000 | 41·85                                               | 44·62    | 0      |
| 1      | 836,405                                                                           | 841,417   | 46·65                                               | 48·05    | 865,288                                                                           | 871,266   | 47·31                                               | 50·14    | 1      |
| 2      | 782,626                                                                           | 790,201   | 48·83                                               | 50·14    | 811,711                                                                           | 820,480   | 49·40                                               | 52·22    | 2      |
| 3      | 754,849                                                                           | 763,787   | 49·61                                               | 50·86    | 782,990                                                                           | 793,359   | 50·20                                               | 52·99    | 3      |
| 4      | 736,845                                                                           | 746,587   | 49·81                                               | 51·01    | 764,060                                                                           | 776,427   | 50·43                                               | 53·20    | 4      |
| 5      | 723,716                                                                           | 734,068   | 49·71                                               | 50·87    | 750,550                                                                           | 762,622   | 50·33                                               | 53·08    | 5      |
| 6      | 713,881                                                                           | 726,815   | 49·39                                               | 50·38    | 740,584                                                                           | 755,713   | 50·00                                               | 52·56    | 6      |
| 7      | 706,156                                                                           | 721,103   | 48·92                                               | 49·77    | 732,771                                                                           | 750,276   | 49·53                                               | 51·94    | 7      |
| 8      | 699,688                                                                           | 716,309   | 48·37                                               | 49·10    | 726,116                                                                           | 745,631   | 48·98                                               | 51·26    | 8      |
| 9      | 694,346                                                                           | 712,987   | 47·74                                               | 48·37    | 720,537                                                                           | 741,727   | 48·35                                               | 50·53    | 9      |
| 10     | 689,857                                                                           | 708,990   | 47·05                                               | 47·60    | 715,769                                                                           | 738,382   | 47·67                                               | 49·76    | 10     |
| 11     | 685,982                                                                           | 706,146   | 46·31                                               | 46·79    | 711,581                                                                           | 735,405   | 46·95                                               | 48·96    | 11     |
| 12     | 682,512                                                                           | 703,595   | 45·54                                               | 45·96    | 707,770                                                                           | 732,697   | 46·20                                               | 48·13    | 12     |
| 13     | 679,256                                                                           | 701,200   | 44·76                                               | 45·11    | 704,155                                                                           | 730,122   | 45·44                                               | 47·30    | 13     |
| 14     | 676,057                                                                           | 698,840   | 43·97                                               | 44·26    | 700,581                                                                           | 727,571   | 44·66                                               | 46·47    | 14     |
| 15     | 672,776                                                                           | 696,419   | 43·18                                               | 43·41    | 696,917                                                                           | 724,956   | 43·90                                               | 45·63    | 15     |
| 16     | 669,296                                                                           | 693,695   | 42·40                                               | 42·58    | 693,050                                                                           | 722,084   | 43·14                                               | 44·81    | 16     |
| 17     | 665,529                                                                           | 690,746   | 41·64                                               | 41·76    | 688,894                                                                           | 718,993   | 42·40                                               | 44·00    | 17     |
| 18     | 661,402                                                                           | 687,507   | 40·90                                               | 40·96    | 684,378                                                                           | 715,622   | 41·67                                               | 43·21    | 18     |
| 19     | 656,868                                                                           | 683,941   | 40·17                                               | 40·17    | 679,463                                                                           | 711,946   | 40·97                                               | 42·43    | 19     |
| 20     | 651,903                                                                           | 680,033   | 39·48                                               | 39·40    | 674,119                                                                           | 707,949   | 40·29                                               | 41·66    | 20     |
| 21     | 646,502                                                                           | 675,769   | 38·80                                               | 38·64    | 668,345                                                                           | 703,616   | 39·63                                               | 40·92    | 21     |
| 22     | 641,028                                                                           | 671,344   | 38·13                                               | 37·89    | 662,474                                                                           | 699,141   | 38·98                                               | 40·18    | 22     |
| 23     | 635,486                                                                           | 666,754   | 37·46                                               | 37·15    | 656,509                                                                           | 694,521   | 38·33                                               | 39·44    | 23     |
| 24     | 629,882                                                                           | 661,997   | 36·79                                               | 36·41    | 650,463                                                                           | 689,759   | 37·68                                               | 38·71    | 24     |
| 25     | 624,221                                                                           | 657,077   | 36·12                                               | 35·68    | 644,342                                                                           | 684,858   | 37·04                                               | 37·98    | 25     |
| 26     | 618,503                                                                           | 651,998   | 35·44                                               | 34·96    | 638,148                                                                           | 679,822   | 36·39                                               | 37·26    | 26     |
| 27     | 612,731                                                                           | 646,757   | 34·77                                               | 34·24    | 631,891                                                                           | 674,661   | 35·75                                               | 36·54    | 27     |
| 28     | 606,906                                                                           | 641,353   | 34·10                                               | 33·52    | 625,575                                                                           | 669,372   | 35·10                                               | 35·83    | 28     |
| 29     | 601,026                                                                           | 635,778   | 33·43                                               | 32·81    | 619,201                                                                           | 663,959   | 34·46                                               | 35·11    | 29     |
| 30     | 595,089                                                                           | 630,038   | 32·76                                               | 32·10    | 612,774                                                                           | 658,418   | 33·81                                               | 34·41    | 30     |
| 31     | 589,094                                                                           | 624,124   | 32·09                                               | 31·40    | 606,296                                                                           | 652,747   | 33·17                                               | 33·70    | 31     |
| 32     | 583,036                                                                           | 618,056   | 31·42                                               | 30·71    | 599,769                                                                           | 646,957   | 32·53                                               | 33·00    | 32     |
| 33     | 576,912                                                                           | 611,827   | 30·74                                               | 30·01    | 593,196                                                                           | 641,045   | 31·88                                               | 32·30    | 33     |
| 34     | 570,716                                                                           | 605,430   | 30·07                                               | 29·33    | 586,575                                                                           | 635,003   | 31·23                                               | 31·60    | 34     |
| 35     | 564,441                                                                           | 598,860   | 29·40                                               | 28·64    | 579,908                                                                           | 628,842   | 30·59                                               | 30·90    | 35     |
| 36     | 558,083                                                                           | 592,107   | 28·73                                               | 27·96    | 573,192                                                                           | 622,554   | 29·94                                               | 30·21    | 36     |
| 37     | 551,634                                                                           | 585,167   | 28·06                                               | 27·29    | 566,431                                                                           | 616,144   | 29·29                                               | 29·52    | 37     |
| 38     | 545,084                                                                           | 578,019   | 27·39                                               | 26·62    | 559,619                                                                           | 609,599   | 28·64                                               | 28·83    | 38     |
| 39     | 538,428                                                                           | 570,656   | 26·72                                               | 25·96    | 552,758                                                                           | 602,924   | 27·99                                               | 28·15    | 39     |
| 40     | 531,657                                                                           | 563,077   | 26·06                                               | 25·30    | 545,844                                                                           | 596,113   | 27·34                                               | 27·46    | 40     |
| 41     | 524,761                                                                           | 555,254   | 25·39                                               | 24·65    | 538,876                                                                           | 589,167   | 26·69                                               | 26·78    | 41     |
| 42     | 517,734                                                                           | 547,288   | 24·73                                               | 24·00    | 531,849                                                                           | 582,104   | 26·03                                               | 26·10    | 42     |
| 43     | 510,567                                                                           | 539,161   | 24·07                                               | 23·35    | 524,765                                                                           | 574,919   | 25·38                                               | 25·42    | 43     |
| 44     | 503,247                                                                           | 530,858   | 23·41                                               | 22·71    | 517,617                                                                           | 567,612   | 24·72                                               | 24·74    | 44     |

## EXPECTATION OF LIFE.

| AGE. | MALES.                                                                            |          |                                                     |          | FEMALES.                                                                          |          |                                                     |          | AGE. |
|------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------|----------|------|
|      | OF 1,000,000 BORN,<br>THE NUMBER SURVIVING<br>AT THE END OF EACH<br>YEAR OF LIFE. |          | MEAN<br>AFTER-LIFETIME<br>(EXPECTATION<br>OF LIFE). |          | OF 1,000,000 BORN,<br>THE NUMBER SURVIVING<br>AT THE END OF EACH<br>YEAR OF LIFE. |          | MEAN<br>AFTER-LIFETIME<br>(EXPECTATION<br>OF LIFE). |          |      |
|      | 1838-54.                                                                          | 1871-80. | 1838-54.                                            | 1871-80. | 1838-54.                                                                          | 1871-80. | 1838-54.                                            | 1871-80. |      |
|      | Col'mn<br>1                                                                       | 2        | 3                                                   | 4        | 5                                                                                 | 6        | 7                                                   | 8        |      |
| 45   | 495,770                                                                           | 522,374  | 22·76                                               | 22·07    | 510,403                                                                           | 560,174  | 24·06                                               | 24·06    | 45   |
| 46   | 488,126                                                                           | 513,702  | 22·11                                               | 21·44    | 503,122                                                                           | 552,602  | 23·40                                               | 23·38    | 46   |
| 47   | 480,308                                                                           | 504,836  | 21·46                                               | 20·80    | 495,768                                                                           | 544,892  | 22·74                                               | 22·71    | 47   |
| 48   | 472,306                                                                           | 495,761  | 20·82                                               | 20·18    | 488,339                                                                           | 537·043  | 22·03                                               | 22·03    | 48   |
| 49   | 464,114                                                                           | 486,479  | 20·17                                               | 19·55    | 480,833                                                                           | 529,048  | 21·42                                               | 21·36    | 49   |
| 50   | 455,727                                                                           | 476,980  | 19·54                                               | 18·93    | 473,245                                                                           | 520,901  | 20·75                                               | 20·68    | 50   |
| 51   | 447,139                                                                           | 467,254  | 18·90                                               | 18·31    | 465,572                                                                           | 512,607  | 20·09                                               | 20·01    | 51   |
| 52   | 438,099                                                                           | 457,022  | 18·28                                               | 17·71    | 457,814                                                                           | 504,188  | 19·42                                               | 19·34    | 52   |
| 53   | 428,801                                                                           | 446,510  | 17·67                                               | 17·12    | 449,966                                                                           | 495,645  | 18·75                                               | 18·66    | 53   |
| 54   | 419,256                                                                           | 435,729  | 17·06                                               | 16·53    | 442,027                                                                           | 486,973  | 18·08                                               | 17·98    | 54   |
| 55   | 409,460                                                                           | 424,677  | 16·45                                               | 15·95    | 433,331                                                                           | 477,440  | 17·43                                               | 17·33    | 55   |
| 56   | 399,408                                                                           | 413,351  | 15·86                                               | 15·37    | 424,239                                                                           | 467,443  | 16·79                                               | 16·69    | 56   |
| 57   | 389,088                                                                           | 401,740  | 15·26                                               | 14·80    | 414,761                                                                           | 456,992  | 16·17                                               | 16·06    | 57   |
| 58   | 378,481                                                                           | 389,827  | 14·68                                               | 14·24    | 404,895                                                                           | 446,079  | 15·55                                               | 15·45    | 58   |
| 59   | 367,570                                                                           | 377,591  | 14·10                                               | 13·68    | 394,636                                                                           | 434,695  | 14·94                                               | 14·84    | 59   |
| 60   | 356,330                                                                           | 365,011  | 13·53                                               | 13·14    | 383,974                                                                           | 422,835  | 14·34                                               | 14·24    | 60   |
| 61   | 344,744                                                                           | 352,071  | 12·96                                               | 12·60    | 372,895                                                                           | 410,477  | 13·75                                               | 13·65    | 61   |
| 62   | 332,789                                                                           | 338,820  | 12·41                                               | 12·07    | 361,387                                                                           | 397,644  | 13·17                                               | 13·08    | 62   |
| 63   | 320,451                                                                           | 325,256  | 11·87                                               | 11·56    | 349,436                                                                           | 384,819  | 12·60                                               | 12·51    | 63   |
| 64   | 307,720                                                                           | 311,368  | 11·34                                               | 11·05    | 337,031                                                                           | 370,495  | 12·05                                               | 11·96    | 64   |
| 65   | 294,588                                                                           | 297,156  | 10·82                                               | 10·55    | 324,165                                                                           | 356,165  | 11·51                                               | 11·42    | 65   |
| 66   | 281,064                                                                           | 282,638  | 10·32                                               | 10·07    | 310,833                                                                           | 341,326  | 10·98                                               | 10·90    | 66   |
| 67   | 267,160                                                                           | 267,829  | 9·83                                                | 9·60     | 297,048                                                                           | 325,988  | 10·47                                               | 10·39    | 67   |
| 68   | 252,901                                                                           | 252,763  | 9·36                                                | 9·14     | 282,819                                                                           | 310,170  | 9·97                                                | 9·89     | 68   |
| 69   | 238,328                                                                           | 237,487  | 8·90                                                | 8·70     | 268,177                                                                           | 293,899  | 9·48                                                | 9·41     | 69   |
| 70   | 223,490                                                                           | 222,056  | 8·45                                                | 8·27     | 253,161                                                                           | 277,225  | 9·02                                                | 8·95     | 70   |
| 71   | 208,453                                                                           | 206,539  | 8·03                                                | 7·85     | 237,822                                                                           | 260,207  | 8·57                                                | 8·50     | 71   |
| 72   | 193,297                                                                           | 190,971  | 7·62                                                | 7·45     | 222,230                                                                           | 242,934  | 8·13                                                | 8·07     | 72   |
| 73   | 178,114                                                                           | 175,449  | 7·22                                                | 7·07     | 206,464                                                                           | 225,497  | 7·71                                                | 7·65     | 73   |
| 74   | 163,003                                                                           | 160,074  | 6·85                                                | 6·70     | 190,620                                                                           | 208,003  | 7·31                                                | 7·25     | 74   |
| 75   | 148,076                                                                           | 144,960  | 6·49                                                | 6·34     | 174,800                                                                           | 190,566  | 6·93                                                | 6·87     | 75   |
| 76   | 133,453                                                                           | 130,227  | 6·15                                                | 6·00     | 159,126                                                                           | 173,316  | 6·56                                                | 6·51     | 76   |
| 77   | 119,251                                                                           | 115,986  | 5·82                                                | 5·68     | 143,722                                                                           | 156,392  | 6·21                                                | 6·16     | 77   |
| 78   | 105,592                                                                           | 102,359  | 5·51                                                | 5·37     | 128,711                                                                           | 139,927  | 5·88                                                | 5·82     | 78   |
| 79   | 92,587                                                                            | 89,449   | 5·21                                                | 5·07     | 114,229                                                                           | 124,065  | 5·56                                                | 5·50     | 79   |
| 80   | 80,343                                                                            | 77,354   | 4·93                                                | 4·79     | 100,394                                                                           | 108,935  | 5·26                                                | 5·20     | 80   |
| 81   | 68,946                                                                            | 66,153   | 4·66                                                | 4·51     | 87,323                                                                            | 94,662   | 4·98                                                | 4·90     | 81   |
| 82   | 58,471                                                                            | 55,842   | 4·41                                                | 4·26     | 75,119                                                                            | 81,305   | 4·71                                                | 4·63     | 82   |
| 83   | 48,970                                                                            | 46,489   | 4·17                                                | 4·01     | 63,862                                                                            | 68,966   | 4·45                                                | 4·37     | 83   |
| 84   | 40,471                                                                            | 38,132   | 3·95                                                | 3·58     | 53,615                                                                            | 57,723   | 4·21                                                | 4·12     | 84   |
| 85   | 32,979                                                                            | 30,785   | 3·73                                                | 3·56     | 44,419                                                                            | 47,631   | 3·98                                                | 3·88     | 85   |
| 86   | 26,476                                                                            | 24,436   | 3·53                                                | 3·36     | 36,284                                                                            | 38,710   | 3·76                                                | 3·66     | 86   |
| 87   | 20,926                                                                            | 19,054   | 3·34                                                | 3·17     | 29,202                                                                            | 30,958   | 3·56                                                | 3·46     | 87   |
| 88   | 16,268                                                                            | 14,576   | 3·16                                                | 2·99     | 23,135                                                                            | 24,338   | 3·36                                                | 3·26     | 88   |
| 89   | 12,428                                                                            | 10,926   | 3·00                                                | 2·82     | 18,027                                                                            | 18,788   | 3·18                                                | 3·08     | 89   |
| 90   | 9,321                                                                             | 8,015    | 2·84                                                | 2·66     | 13,802                                                                            | 14,225   | 3·01                                                | 2·90     | 90   |
| 91   | 6,859                                                                             | 5,748    | 2·69                                                | 2·51     | 10,376                                                                            | 10,553   | 2·85                                                | 2·74     | 91   |
| 92   | 4,946                                                                             | 4,025    | 2·55                                                | 2·37     | 7,650                                                                             | 7,658    | 2·70                                                | 2·58     | 92   |
| 93   | 3,492                                                                             | 2,749    | 2·41                                                | 2·24     | 5,526                                                                             | 5,429    | 2·55                                                | 2·44     | 93   |
| 94   | 2,411                                                                             | 1,828    | 2·29                                                | 2·12     | 3,908                                                                             | 3,756    | 2·42                                                | 2·30     | 94   |
| 95   | 1,628                                                                             | 1,183    | 2·17                                                | 2·01     | 2,704                                                                             | 2,533    | 2·29                                                | 2·17     | 95   |
| 96   | 1,071                                                                             | 742      | 2·06                                                | 1·90     | 1,827                                                                             | 1,661    | 2·17                                                | 2·11     | 96   |
| 97   | 688                                                                               | 452      | 1·95                                                | 1·81     | 1,204                                                                             | 1,057    | 2·06                                                | 2·03     | 97   |
| 98   | 430                                                                               | 266      | 1·85                                                | 1·72     | 774                                                                               | 652      | 1·96                                                | 1·83     | 98   |
| 99   | 262                                                                               | 151      | 1·76                                                | 1·65     | 483                                                                               | 389      | 1·86                                                | 1·73     | 99   |
| 100  | 154                                                                               | 82       | 1·68                                                | 1·61     | 295                                                                               | 225      | 1·76                                                | 1·62     | 100  |



# RULES BY WHICH THE PERSONAL ESTATES OF PERSONS DYING INTESTATE ARE DISTRIBUTED.

## *If the Intestate die leaving*

## *His representatives take in the proportion following:—*

|                                                                                                                     |                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wife and child, or children .....                                                                                   | One-third to wife, rest to child or children; and if children are dead, then to the representatives (that is, their lineal descendants), except such child or children, not heirs-at-law, who had estate by settlement of intestate, or were advanced by him in his lifetime, equal to other shares. |
| Wife only, no blood relations .....                                                                                 | Half to wife, other half to the Crown.                                                                                                                                                                                                                                                               |
| Wife, no near relations .....                                                                                       | Half to wife, rest to next-of-kin in equal degree to intestate, or their legal representatives.                                                                                                                                                                                                      |
| No wife or child .....                                                                                              | All to next-of-kin and their legal representatives                                                                                                                                                                                                                                                   |
| No wife, but child, children, or representatives of them, whether such child or children by one or more wives ..... | All to him, her, or them.                                                                                                                                                                                                                                                                            |
| Children by two wives .....                                                                                         | Equally to all.                                                                                                                                                                                                                                                                                      |
| If no child, children, or representatives of them                                                                   | All to next-of-kin in equal degree to intestate.                                                                                                                                                                                                                                                     |
| Child, and grandchild by deceased child .....                                                                       | Half to child, half to grandchild, who takes by representation.                                                                                                                                                                                                                                      |
| Husband .....                                                                                                       | Whole to him.                                                                                                                                                                                                                                                                                        |
| Father, and brother or sister .....                                                                                 | Whole to father.                                                                                                                                                                                                                                                                                     |
| Mother, and brother or sister .....                                                                                 | Whole to them equally.                                                                                                                                                                                                                                                                               |
| Wife, mother, brothers, sisters, and nieces .....                                                                   | Half to wife, residue to mother, brothers, sisters, and nieces.                                                                                                                                                                                                                                      |
| Wife, and father .....                                                                                              | Half to wife, and half to father.                                                                                                                                                                                                                                                                    |
| Wife, mother, nephews, and nieces .....                                                                             | Half to wife, one-fourth to mother, and other fourth to nephews and nieces.                                                                                                                                                                                                                          |
| Wife, brothers or sisters, and mother .....                                                                         | Half to wife, half to brothers or sisters, and mother                                                                                                                                                                                                                                                |
| Mother, but no wife, child, father, brother, sister, nephew, or niece .....                                         | The whole to mother.                                                                                                                                                                                                                                                                                 |
| Wife, and mother .....                                                                                              | Half to wife, half to mother.                                                                                                                                                                                                                                                                        |
| Brother or sister of whole blood, and brother or sister of half blood .....                                         | Equally to both.                                                                                                                                                                                                                                                                                     |
| Posthumous brother or sister, and mother ...                                                                        | Equally to both.                                                                                                                                                                                                                                                                                     |
| Posthumous brother or sister, and brother or sister born in lifetime of father .....                                | Equally to both.                                                                                                                                                                                                                                                                                     |
| Father's father, and mother's mother .....                                                                          | Equally to both.                                                                                                                                                                                                                                                                                     |
| Uncle or aunt's children, and brother's or sister's grandchildren .....                                             | Equally to all.                                                                                                                                                                                                                                                                                      |
| Grandmother, uncle, or aunt .....                                                                                   | All to grandmother.                                                                                                                                                                                                                                                                                  |
| Two aunts, nephew, and niece .....                                                                                  | Equally to all.                                                                                                                                                                                                                                                                                      |
| Uncle, and deceased uncle's child .....                                                                             | All to uncle.                                                                                                                                                                                                                                                                                        |
| Uncle by mother's side, and deceased uncle or aunt's child .....                                                    | All to uncle.                                                                                                                                                                                                                                                                                        |
| Nephew by brother, and nephew by half-sister                                                                        | Equally <i>per capita</i> .*                                                                                                                                                                                                                                                                         |
| Nephew by deceased brother, and nephews and nieces by deceased sister .....                                         | Each in equal shares <i>per capita</i> , and not <i>per stirpes</i> .                                                                                                                                                                                                                                |
| Brother and grandfather .....                                                                                       | Whole to brother.                                                                                                                                                                                                                                                                                    |
| Brother's grandson, and brother or sister's daughter .....                                                          | All to daughter.                                                                                                                                                                                                                                                                                     |
| Brother and two aunts .....                                                                                         | All to brother.                                                                                                                                                                                                                                                                                      |
| Brother, and wife .....                                                                                             | Half to brother, half to wife.                                                                                                                                                                                                                                                                       |
| Mother, and brother .....                                                                                           | Equally.                                                                                                                                                                                                                                                                                             |
| Wife, mother, and children of a deceased brother (or sister) .....                                                  | { Half to wife, a fourth to mother, and a fourth <i>per stirpes</i> to deceased brother's or sister's children.                                                                                                                                                                                      |
| Wife, brother, or sister, and children of a deceased brother or sister .....                                        | { Half to wife, one-fourth to brother or sister <i>per capita</i> , one-fourth to deceased brother's or sister's children <i>per stirpes</i> .                                                                                                                                                       |
| Brother or sister, and children of a deceased brother or sister .....                                               | { Half to brother or sister <i>per capita</i> , half to children of deceased brother or sister <i>per stirpes</i> .                                                                                                                                                                                  |
| Grandfather, no nearer relation .....                                                                               | All to grandfather.                                                                                                                                                                                                                                                                                  |

\* That is, taking individually, and not by representation. Thus, if A die, leaving three brothers or sisters, they each take an equal part of his effects in his or her own right. But if either of them die, leaving children, his children would take his share *per stirpes*, that is *through him*, and not in their own rights.

By the Act 19 & 20 Vict. all special local customs relating to the estates of intestates are abolished.

## CIVIL LIST PENSIONS.

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*LIST of all PENSIONS granted during the Year ended 20th June, 1887, and charged upon the CIVIL LIST.*

|                                                                                                                                                                                                      |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 28th July, 1886.—LOUISA JOHANNA LADY FARNBOROUGH .....                                                                                                                                               | £250   |
| In consideration of the distinguished Parliamentary and literary services of her late husband.                                                                                                       |        |
| 28th July, 1886.—Mr. AUGUSTUS MONGREDIEN .....                                                                                                                                                       | 100    |
| In consideration of the merits and public utility of his literary work.                                                                                                                              |        |
| 28th July, 1886.—Mr. JACOB BRETT .....                                                                                                                                                               | 100    |
| In recognition of his services in connection with the introduction of submarine telegraphy.                                                                                                          |        |
| 9th September, 1886.—Mr. THOMAS ADOLPHUS TROLLOPE.....                                                                                                                                               | 200    |
| In consideration of the value of his literary work, his straitened means, and his advanced age.                                                                                                      |        |
| 5th November, 1886.—Mr. EDMOND CHESTER WATERS.....                                                                                                                                                   | 100    |
| In consideration of his long and arduous labours as a writer on genealogy.                                                                                                                           |        |
| 29th December, 1886.—Mr. THOMAS BOLTON.....                                                                                                                                                          | 50     |
| In consideration of the services which he has rendered to science by his investigations in connection with microscopic Fauna.                                                                        |        |
| 14th January, 1887.—Mr. CHARLES KENT.....                                                                                                                                                            | 100    |
| In recognition of the value of his contributions to biographical and other literature.                                                                                                               |        |
| 1st April, 1887.—Mr. GERALD MASSEY.....                                                                                                                                                              | 30     |
| In consideration of his literary merit, and of the smallness of his means of support.                                                                                                                |        |
| 21st May, 1887.—ANNA MARIA LADY PALLISER (additional) .....                                                                                                                                          | 150    |
| In consideration of the services of her late husband, Sir William Palliser, as an inventor of munitions of war, &c., and of her destitute condition, and to enable her to provide for her daughters. |        |
| 18th June, 1887.—Mrs. JESSIE CLERK .....                                                                                                                                                             | 120    |
| In consideration of the literary merits of her late husband, the Reverend Archibald Clerk, LL.D., as a Celtic scholar, and of her destitute condition.                                               |        |
| Total Grants.....                                                                                                                                                                                    | £1,200 |



PUBLIC GENERAL ACTS OF PARLIAMENT PASSED IN THE  
50TH AND 51ST YEARS OF HER MAJESTY'S REIGN.

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PUBLIC ACTS OF 1887.

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*\*\* The figures before each Act denote the Chapter*

1. CONSOLIDATED FUND (No. 1).—An Act to apply certain sums out of the Consolidated Fund to the service of the years ending on the thirty-first day of March one thousand eight hundred and eighty-seven and one thousand eight hundred and eighty-eight.

2. ARMY (ANNUAL).—An Act to provide, during twelve months, for the Discipline and Regulation of the Army.

Continuing for one year the Army Act, 1881, removing doubts as to the meaning of certain parts of that Act, and fixing the rates to be paid to licensed victuallers for accommodation of troops billeted upon them.

3. COUNTY COURTS (EXPENSES).—An Act to amend the Acts relating to County Courts so far as regards the payment of certain expenses connected with County Courts.

4. MERCHANT SHIPPING (FISHING BOATS).—An Act to amend the provisions of the Merchant Shipping (Fishing Boats) Acts.

Defines "register tonnage" as "gross tonnage" for certain purposes. Extends to skippers of fishing vessels certain provisions of Merchant Shipping (Fishing Boats) Act, 1883, concerning wages and discharge, discipline, and summary settlement of disputes. Compels owners to render detailed accounts to skippers and crews in certain cases. Requires every trawler of 25 tons register and upwards to have on board a certificated second hand. Authorises Board of Trade to make regulations, subject to approval of Parliament, as to conveyance of fish from trawlers to collecting vessels, to prescribe fees payable on engagement or discharge of fishing crews, and to inquire into casualties.

5. ISLE OF MAN (CUSTOMS).—An Act to amend the Law respecting the Customs Duties of the Isle of Man.

Empowers Court of Tynwald, with consent of Treasury, to impose, abolish, or vary customs duties provisionally, subject to approval of Parliament. Also alters the duties on wine imported into the Isle of Man.

## PUBLIC GENERAL ACTS OF PARLIAMENT PASSED 1886-7.

6. SUPREME COURT OF JUDICATURE (IRELAND).—An Act to amend the Supreme Court of Judicature Act (Ireland), 1877.

Equalises the status, &c., of certain judgeships, authorises consolidation by Order in Council of the Common Law Divisions, and makes other arrangements as to the conduct of judicial business.

7. CUSTOMS CONSOLIDATION ACT, 1876, AMENDMENT.—An Act to amend the Customs Consolidation Act, 1876.

Makes guilty knowledge a necessary condition of forfeiture and imprisonment in cases of smuggling, &c.

8. INCUMBENTS OF BENEFICES LOANS EXTENSION ACT, 1886, AMENDMENT.—An Act to amend the Incumbents of Benefices Loans Extension Act, 1886.

9. POLICE DISABILITIES REMOVAL.—An Act to remove the Disabilities of the Police to vote at Parliamentary Elections.

10. DUKE OF CONNAUGHT'S LEAVE.—An Act to enable His Royal Highness the Duke of Connaught to return to England for a limited time for the purpose of being present at the celebration of Her Majesty's Jubilee without thereby resigning his command in Bombay.

11. CONVERSION OF INDIA STOCK.—An Act for giving facilities for the conversion of India Four per Cent Stock into India Three and a half per Cent Stock, and for other purposes relating thereto.

12. TRURO BISHOPRIC AND CHAPTER ACTS AMENDMENT.—An Act to amend the Bishopric of Truro Act, 1876, and the Truro Chapter Act, 1878.

Contains provisions as to the government, endowment, &c., of Truro Cathedral and of the Parish Church of St. Mary, which forms part thereof.

13. PENSIONS (COLONIAL SERVICE).—An Act to extend, in certain cases, the provisions of the Superannuation Act, 1859, and to extend and otherwise amend the provisions of the Colonial Governors (Pensions) Acts, 1865 and 1872.

14. CONSOLIDATED FUND (No. 2).—An Act to apply the sum of thirteen million six hundred and seventy-five thousand six hundred and fifty-nine pounds out of the Consolidated Fund to the service of the year ending on the thirty-first day of March one thousand eight hundred and eighty-eight.

15. CUSTOMS AND INLAND REVENUE.—An Act to grant certain Duties of Customs and Inland Revenue, to alter other duties, and to amend the Laws relating to Inland Revenue.



Continues the duty on tea ; reduces the duty on tobacco, and restricts the quantity of moisture which it may contain ; reduces the duty on certain sea policies and the period within which foreign sea policies must be stamped ; increases the stamp duties on transfers of certain stock, &c., and provides for commutation of such duties in certain cases ; fixes the rate of income tax for the year, and makes provision as to its assessment and collection.

16. NATIONAL DEBT AND LOCAL LOANS.—An Act to amend the law respecting the National Debt and the charge thereof on the Consolidated Fund, and to make further provision respecting Local Loans.

Reduces permanent annual charge for National Debt ; repeals National Debt Act, 1881, so far as it provides for an annual sinking fund ; and authorises exchange of terminable annuities created under section 2 of the National Debt Act, 1883, for longer terminable annuities and application of old sinking fund to payment of Friendly Societies Debt. Authorises advance by National Debt Commissioners of money for local loans ; establishes local loans fund under control of the Commissioners ; authorises creation of 3 per cent local loans stock ; and makes provisions as to the management, &c., of such fund and stock.

17. METROPOLIS MANAGEMENT (BATTERSEA AND WESTMINSTER).—An Act to amend the Metropolis Management Acts.

Separates the parish of St. Mary, Battersea, excluding Penge, from the Wandsworth District, and gives it control of its own local affairs and a representative at the Metropolitan Board of Works. Also abolishes the Board of Works for the Westminster District, thus giving the United Vestry of St. Margaret and St. John direct control of the local expenditure.

18. TRUSTS (SCOTLAND) ACT, 1867, AMENDMENT.—An Act to amend the Trusts (Scotland) Act, 1867.

Empowers trustees to reduce, temporarily or permanently, the rent of leasehold farm lands, &c.

19. QUARRY (FENCING).—An Act to provide for the Fencing of Quarries.

20. CRIMINAL LAW AND PROCEDURE (IRELAND).—An Act to make better provision for the prevention and punishment of Crime in Ireland, and for other purposes relating thereto.

Provides that, by order of the Attorney General, inquiries may be held by resident magistrates, and witnesses examined upon oath, although no person may be charged, whenever it appears upon sworn information that certain offences have been committed in a proclaimed district. Gives power to two magistrates to try persons accused of certain crimes under the Act, and to inflict punishment not exceeding six months hard labour. Power is given to change the place of trial for a crime committed in a proclaimed district, against which change,

however, the Defendant is given a right of protest. Power is also given to either the Defendant or the Attorney General to demand a Special Jury. The Lord Lieutenant in Council is empowered to declare by proclamation that the provisions of the Act relating to proclaimed districts, or any of them, shall be in force in any district, and by special proclamation, subject to certain limitations, to declare that any association formed for the commission of crimes, or carrying on operations for or by the commission of crimes, or encouraging or aiding persons to commit crimes, or promoting or inciting to violence or intimidation, or interfering with the administration of the law, or disturbing the maintenance of law and order, is a dangerous association, and such association may then be suppressed, and any person calling or attending a meeting of or in any way taking part in the proceedings of such suppressed association is declared guilty of an offence punishable under the Act. Such special proclamation must be laid before Parliament within seven days, and may be set aside within fourteen days after being so laid before Parliament, upon address to the Crown, from either House; if issued during the recess it shall expire at the end of a week from its date of issue unless Parliament be, during such week, summoned to meet within twenty days from the date of the summons.

21. **WATER COMPANIES (REGULATION OF POWERS).**—An Act to limit the powers of the Water Companies to cut off the Tenants' Water Supply where the rate is paid by the landlord.

Abolishes, in certain cases, the power of cutting off supply to dwelling-houses, &c., for non-payment of water rate.

22. **PUBLIC LIBRARIES ACTS AMENDMENT.**—An Act to amend the Public Libraries Acts.

Contains provisions which, by greatly diminishing the necessary cost of public libraries, will render possible their establishment in small towns, villages, &c.

Owing to the small area of metropolitan parishes the inhabitants of neighbouring districts often derive as much benefit from a public library as those of the parish in which it is situated, who have hitherto defrayed its entire cost. This difficulty is obviated by conferring upon district boards of works in the Metropolis power to establish and maintain public libraries.

23. **INCUMBENTS RESIGNATION ACT, 1871, AMENDMENT.**—An Act to amend the Incumbents Resignation Act, 1871.

Enacts that pensions hereafter granted to retiring incumbents shall (with certain exceptions) vary with the tithe averages, and the income of a benefice shall not be reduced by pensions below the sum necessary for due performance of the services of the church; and makes other alterations in the existing law.

24. **CROFTERS HOLDINGS (SCOTLAND).**—An Act to amend the Crofters Holdings (Scotland) Act, 1886.



## PUBLIC GENERAL ACTS OF PARLIAMENT PASSED 1886-7.

Enables Crofters Commission to protect effects of crofters from sale for recovery of arrears while an application to fix a fair rent awaits decision, also to deal with arrears under 49 and 50 Vict. c. 29, s. 6, although promissory note, &c., may have been given for such arrears.

**25. PROBATION OF FIRST OFFENDERS.**—An Act to permit the conditional Release of First Offenders in certain cases.

Enables court to release, upon probation, any person, convicted of an offence punishable with not more than two years' imprisonment, against whom no previous conviction is proved. Provision is made for re-arrest and punishment of probationers failing to observe the conditions of their release.

**26. ALLOTMENTS AND COTTAGE GARDENS COMPENSATION FOR CROPS.**—An Act to provide Compensation to the Occupiers of Allotments and Cottage Gardens for crops left in the ground at the end of their tenancies.

Provides that, notwithstanding any agreement to the contrary, compensation for standing crops, for labour expended and manure applied since last crop was taken, and for unexhausted improvements made with landlords' consent, shall be paid by landlords to outgoing tenants of allotments and cottage gardens.

**27. MARKETS AND FAIRS (WEIGHING OF CATTLE).**—An Act to amend the Law with respect to Weighing Cattle in Markets and Fairs.

The market authority of any fair or market at which cattle are sold unless specially exempted, is to weigh cattle on sale whenever required to do so, and is to provide suitable buildings, weighing machines, &c., for the purpose.

**28. MERCHANDISE MARKS.**—An Act to consolidate and amend the Law relating to Fraudulent Marks on Merchandise.

Enacts that every person who forges any trade mark or falsely applies to goods or their coverings, labels, &c., any trade mark or colourable imitation of a trade mark, or any false trade description, or who disposes of or has in his possession any instrument for forging a trade mark, or who causes any of the above things to be done, shall be guilty of an offence against the Act, and also that any person selling or having in his possession for sale any goods falsely marked shall be guilty of an offence unless he proves that he acted innocently and gives all the information in his power to the prosecutor. Persons so offending are rendered liable to fine and imprisonment not exceeding two years, with or without hard labour, and to forfeiture of the articles concerned. The marking on a watch case is to be considered as applying to the whole watch unless otherwise shown. Any person in the United Kingdom who is accessory to the commission abroad of any act which if committed here would be punishable under the Act is rendered liable to prosecution as if he were a principal. Very comprehensive definitions of "trade mark," "trade description," &c., are adopted.

29. **MARGARINE.**—An Act for the better Prevention of the Fraudulent Sale of Margarine.

Enacts that all imitations of butter shall be sold as “Margarine,” and that the wrappers or packages in which they are sold shall be so marked; that the onus of proof shall lie upon the vendor whenever the defence is set up that he believed margarine sold or kept for sale by him to be butter; and that expenses of prosecutions under the Act may be paid from penalties.

30. **SETTLED LAND ACTS AMENDMENT.**—An Act to amend the Settled Land Act (1882).

Provides for redemption of certain rent charges, &c.

31. **METROPOLITAN BOARD OF WORKS (MONEY).**—An Act further to amend the Acts relating to the raising of Money by the Metropolitan Board of Works; and for other purposes.

Authorises the Board to borrow further moneys, and regulates its financial operations for the forthcoming year.

32. **OPEN SPACES.**—An Act for extending certain Provisions of the Metropolitan Open Spaces Acts, 1877 and 1881, with Amendments, to Sanitary Districts throughout England, Wales, and Ireland; and for other purposes.

33. **LAND LAW (IRELAND).**—An Act to amend the Land Law (Ireland) Act, 1881, and the Purchase of Land (Ireland) Act, 1885, and for other purposes connected therewith.

Extends to leaseholders, with certain exceptions, the benefits of the Land Law (Ireland) Act, 1881; provides that proceedings in ejectment may be met by an application to fix a fair rent, and that the application and ejectment may be disposed of at the same time; that six weeks after judgment in ejectment proceedings has been obtained the landlord shall serve upon the tenant a notice of ejectment instead of evicting him, and that thereupon the tenant shall become a caretaker, and the period of redemption shall run from that day. Gives power to any middleman to surrender his holding when the rent received by him has been reduced by the Court to a sum less than he pays. Limits the definition of “town parks.” Makes provisions for facilitating the purchase by tenants of their holdings and for disposal of guarantee funds, &c.; reduces the rate of interest on certain outstanding loans and extends the periods for repayment; provides for an annual re-adjustment in 1887, 1888, and 1889 of judicial rents fixed before 1886; gives power to the Court to stay eviction and to order payment by instalments when a tenant is unable, through no fault of his own, to pay a judgment debt, &c.; and gives right of appeal in certain cases.



## PUBLIC GENERAL ACTS OF PARLIAMENT PASSED 1886-7.

34. LONDON PARKS AND WORKS.—An Act for the transfer to the Metropolitan Board of Works and the maintenance of certain Public Parks and Works in the Metropolis.

Victoria Park, Battersea Park, Kennington Park, Bethnal Green Museum Garden, Chelsea Embankment, and Westminster Bridge are by this Act transferred to the Metropolitan Board of Works, and provision is made for their maintenance, management, &c.

35. CRIMINAL PROCEDURE (SCOTLAND).—An Act to simplify and amend the Criminal Law of Scotland and its procedure, and to alter the Constitution of the Justiciary and Sheriff Courts in Scotland.

36. LIEUTENANCY CLERKS' ALLOWANCES.—An Act for amending the Allowances payable to Clerks of General Meetings of Lieutenancy.

Clerks hereafter appointed are to receive no allowances under the Volunteer and Yeomanry Acts, and the allowances of certain existing clerks are to be reduced.

37. PUBLIC WORKS LOANS.—An Act to grant money for the purpose of certain Local Loans; and for other purposes relating to Local Loans.

Authorises issue, by National Debt Commissioners, of money to certain public authorities for the purposes of local loans, and the writing off from the account of assets of the Local Loans Fund of certain outstanding debts; extends to additional local authorities the power of guaranteeing harbour loans; and applies the surplus of the Besses Lights Fund to the building of two additional lighthouses in Ceylon.

38. PUBLIC-HOUSES, HOURS OF CLOSING (SCOTLAND).—An Act to provide for the earlier closing of premises licensed for the sale of Exciseable Liquors in Scotland.

Conferring upon licensing authorities power to fix any time not earlier than ten nor later than eleven for closing public-houses, &c.

39. LUNACY DISTRICTS (SCOTLAND).—An Act to make provision for altering and varying Lunacy Districts in Scotland.

Authorises General Board of Commissioners in Lunacy for Scotland to alter and vary lunacy districts under certain conditions; also contains provisions as to the powers, liabilities, &c., of existing and new district boards.

40. SAVINGS BANKS.—An Act to amend the Acts relating to Savings Banks and to the Purchase of Small Government Annuities, and to assuring Payments of Money after Death.

Empowers Postmaster-General to make Post-office savings banks regulations for payment or transfer of deposits standing in the names of minors or of persons deceased or of unsound mind—for transfer of sums from one account to another—for determining what evidence shall be accepted by Postmaster-General for

the purposes of payment or transfer, and what receipts shall be a good discharge for him—for applying to Post-office savings banks all or any of the provisions of the Trustee Savings Banks Act, 1863, with or without modification—and for nomination by a depositor of a person or persons to whom his deposits, not exceeding £100, shall be paid on his death; authorises Treasury to extend all or any of these regulations to trustee savings banks; gives power to vary the minimum sum which may be invested in stock, and provides that money invested shall not be included in computing the maximum amount allowed to be deposited in the year, and that deposits standing to account of minors or lunatics may be invested in stock; sanctions insurances on lives of third persons; and fixes price of certificates of birth, death, and marriage required for savings bank purposes.

41. SHERIFF OF LANARKSHIRE.—An Act to remove doubts as to the appointment of the Sheriff of Lanarkshire, and to confirm the same.

42. PUBLIC LIBRARIES CONSOLIDATION (SCOTLAND).—An Act to amend and consolidate the Public Libraries (Scotland) Acts.

43. STANNARIES.—An Act to amend the Stannaries Act, 1869, and for other purposes relating thereto.

Gives workmen's wages priority over other debts, and provides for their due and prompt payment; gives miners control of mine club funds, &c., and makes other provisions for the security of the workmen; also contains enactments as to registration, winding-up, &c., of mining companies.

44. TRINIDAD AND TOBAGO.—An Act to enable Her Majesty by Order in Council to unite the Colonies of Trinidad and Tobago into one Colony.

45. METROPOLITAN POLICE.—An Act for further amending the Enactments relating to Offices, Stations, and Buildings for the Metropolitan Police Force.

Extends borrowing and other powers of Metropolitan Police Receiver.

46. TRUCK AMENDMENT.—An Act to amend and extend the Law relating to Truck.

Extends the Truck Act, 1831, so as to include all workmen except farm servants; provides that customary and other advances of wages shall be paid without deduction; that orders for goods shall not be considered as equivalent to wages; that dealing at particular shops shall not be made a condition of employment; and that artificers shall be paid in cash and not by barter for certain classes of goods made at home. Also contains provisions as to penalties, &c.

47. TRUSTEE SAVINGS BANKS.—An Act to provide for examination into the affairs of Trustee Savings Banks, and to remove doubts as to the Law relating to the winding-up of such Banks.



## PUBLIC GENERAL ACTS OF PARLIAMENT PASSED 1886-7.

48. ALLOTMENTS.—An Act to facilitate the provision of Allotments for the Labouring Classes.

Authorises any district sanitary authority, upon requisition, to purchase or hire, by agreement, suitable land for allotments, but only at such cost as the rent of the allotments will recoup. Failing such agreement the county authority may make a provisional order, subject to confirmation by Parliament, conferring compulsory powers upon the district authority. The land acquired shall be drained, fenced, &c., by the district authority, who shall make regulations for the letting, &c., of the allotments. No person shall hold allotments amounting to more than one acre, and sub-letting shall not be allowed. The rents shall be sufficient to ensure sanitary authority from loss. Not more than a quarter's rent shall be required in advance. Common pastures may in certain cases be provided. Provisions are also made as to cost, management, &c.

49. CHARITABLE TRUSTS.—An Act to amend the Charitable Trusts Acts, 1853 to 1869, so far as respects the officers of the Charity Commissioners for England and Wales and the Official Trustees acting under those Commissioners.

50. APPROPRIATION.—An Act to apply a sum out of the Consolidated Fund to the service of the year ending on the thirty-first day of March, one thousand eight hundred and eighty-eight, and to appropriate the Supplies granted in this Session of Parliament.

51. VALUATION OF LANDS (SCOTLAND).—An Act to amend the Valuation of Lands (Scotland) Amendment Act, 1867.

52. SECRETARY FOR SCOTLAND.—An Act to Amend the Secretary for Scotland Act, 1885.

Transfers to Secretary for Scotland the powers and duties, with certain exceptions, vested in or imposed upon "one of Her Majesty's Principal Secretaries of State," so far as the same relate to Scotland, with other powers and duties.

53. ESCHEAT (PROCEDURE).—An Act for repealing certain Enactments relating to Escheators and the Procedure in cases of Escheat; and for regulating the Procedure in such cases.

Repealing obsolete Acts, and authorising Lord Chancellor to make rules for procedure.

54. BRITISH SETTLEMENTS.—An Act to enable Her Majesty to provide for the Government of Her Possessions acquired by Settlement.

55. SHERIFFS.—An Act to consolidate the Law relating to the office of Sheriff in England, and to repeal certain enactments relating to Sheriffs which have ceased to be in force or have become unnecessary.

## PUBLIC GENERAL ACTS OF PARLIAMENT PASSED 1886-7.

56. FRIENDLY SOCIETIES.—An Act to amend the Friendly Societies Act, 1875.

57. DEEDS OF ARRANGEMENT.—An Act to provide for the Registration of Deeds of Arrangement.

58. COAL MINES REGULATION.—An Act to consolidate with amendments the Coal Mines Acts, 1872 and 1886, and the Stratified Ironstone Mines (Gunpowder) Act, 1881.

Consolidates existing law, with important amendments as to construction and use of safety lamps, blasting, timbering, weighing, &c. Establishes two classes of certificates of competency—the first for managers, the second for under-managers—and enacts that daily supervision shall be exercised either by the manager or the under-manager, the latter having, in the manager's absence, the same responsibility as a manager. Removes, with certain exceptions, the restrictions on prosecution of owners, &c., by workmen.

59. STATUTE LAW REVISION.—An Act for further promoting the Revision of the Statute Law by repealing Enactments which have ceased to be in force or have become unnecessary.

60. PRISON (OFFICERS' SUPERANNUATION, SCOTLAND).—An Act to amend the Prison (Officers' Superannuation) Act, 1878, as to Scotland.

61. LOCAL GOVERNMENT (BOUNDARIES).—An Act for appointing Commissioners to inquire and report as to the Boundaries of certain Areas of Local Government in England.

62. MERCHANT SHIPPING (MISCELLANEOUS).—An Act to amend in certain minor particulars some of the Enactments relating to Merchant Shipping and Seamen.

63. EXPIRING LAWS CONTINUANCE.—An Act to continue various expiring laws.

64. TECHNICAL SCHOOLS (SCOTLAND).—An Act to facilitate the Establishment of Technical Schools in Scotland.

Authorises school boards (now existing in every parish and burgh in Scotland) to establish and maintain technical schools, and to borrow money for that purpose.

65. MILITARY TRAMWAYS.—An Act to facilitate the construction of Tramways by Her Majesty's Principal Secretary of State for the War Department, and for other purposes connected therewith.

66. BANKRUPTCY (DISCHARGE AND CLOSURE).—An Act to amend the Law relating to the discharge of Bankrupts and the closure of Bankruptcy proceedings.

67. SUPERANNUATION.—An Act to amend the Superannuation Acts, 1834 and 1859, and for other purposes.



## PUBLIC GENERAL ACTS OF PARLIAMENT PASSED 1886-7.

Authorises grant of gratuities or annual allowances to persons injured in the service of the State, and of retiring allowances, not exceeding the amounts to which their length of service would entitle them under the ordinary pension scale, to persons removed from office for inefficiency; allows temporary service, if continuous with and merging into permanent service, to count for pension; authorises the allowance, under certain circumstances, of gratuities on retirement to persons employed in public departments who are not entitled to superannuation; and makes certain provisions as to half-pay and pensions of naval and military officers, and other matters.

68. PLURALITIES.—An Act to explain section twenty-six of the Pluralities Act, 1838.

69. CONVEYANCING (SCOTLAND) ACTS (1874 AND 1879) AMENDMENT.—An Act to amend the Conveyancing (Scotland) Act, 1874, and the Conveyancing (Scotland) Act (1874) Amendment Act, 1879.

70. APPELLATE JURISDICTION.—An Act to amend the Appellate Jurisdiction Act, 1876.

71. CORONERS.—An Act to consolidate the Law relating to Coroners.

72. LOCAL AUTHORITIES (EXPENSES).—An Act to amend the Law relating to Expenses of Local Authorities.

Enacts that expenses which have been sanctioned by the Local Government Board shall not be disallowed by district auditors.

73. COPYHOLD.—An Act to amend the Copyhold Acts, and for the Enfranchisement of Copyhold and Customary Lands.

Contains provisions for facilitating the conversion of copyhold into freehold land upon payment of compensation, either by a gross sum or an annual rent charge to the lord of the manor, and of the steward's fees.

## THE QUEEN AND ROYAL FAMILY.

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**THE QUEEN.**—VICTORIA, of the United Kingdom of Great Britain and Ireland, &c., Queen, Defender of the Faith. Her Majesty was born at Kensington Palace, May 24, 1819; succeeded to the throne, June 20, 1837, on the death of her uncle King William IV.; was crowned June 28, 1838; and married, February 10, 1840, to his Royal Highness Prince Albert. Her Majesty is the only child of his late Royal Highness Edward, Duke of Kent, son of King George III. The children of her Majesty are:—

Her Royal Highness Victoria Adelaide Mary Louisa, PRINCESS ROYAL OF ENGLAND AND PRUSSIA, born November 21, 1840, and married to his Royal Highness William, the Crown Prince of Germany, January 25, 1858, and has issue, living, three sons and four daughters.

His Royal Highness Albert Edward, PRINCE OF WALES, born November 9, 1841; married, March 10, 1863, Alexandra of Denmark (Princess of Wales), born December 1, 1844, and has issue, Prince Albert Victor, born January 8, 1864; George Frederick Ernest Albert, born June 3, 1865; Louisa Victoria Alexandra Dagmar, born February 20, 1867; Victoria Alexandra Olga Mary, born July 6, 1868; and Maud Charlotte Mary Victoria, born November 26, 1869.

Her Royal Highness Alice Maud Mary, born April 25, 1843; died December 14, 1878; married his Royal Highness Prince Frederick Louis of Hesse, July 1, 1862; had issue five daughters and two sons; the second son died by an accident, May, 1873; the youngest daughter died November 15, 1878.

His Royal Highness Alfred Ernest Albert, Duke of Edinburgh, born August 6, 1844; married the Grand Duchess Marie of Russia, January 23, 1874; and has had issue a son, born October 15, 1874, and four daughters, born October 29, 1875, November 25, 1876, September 1, 1878, and March, 1884.

Her Royal Highness Helena Augusta Victoria, born May 25, 1846; married to his Royal Highness Prince Frederick Christian Charles Augustus of Schleswig-Holstein-Sonderburg-Augustenburg, July 5, 1866; and has issue living two sons and two daughters.

Her Royal Highness Louisa Carolina Alberta, born March 18, 1848; married to the Marquis of Lorne, eldest son of the Duke of Argyll, March 21, 1871.

His Royal Highness Arthur William Patrick Albert, Duke of Connaught, born May 1, 1850; married Princess Louise Margaret of Prussia, March 13, 1879; issue, a daughter, born January 16, 1882, and a son, born January 15, 1883.

His Royal Highness Leopold George Duncan Albert, Duke of Albany, born April 7, 1853; married, April 27, 1882, Princess Helen of Waldeck; died, March 28, 1884; issue, a daughter, born February 26, 1883, and a son, born July 19, 1884.

Her Royal Highness Beatrice Mary Victoria Feodore, born April 14, 1857; married, July 23, 1885, to Prince Henry of Battenberg; issue, a son, born November 23, 1886, and a daughter, born October 24, 1887.



## LIST OF ADMINISTRATIONS IN THE PRESENT CENTURY.

Ernest Augustus William Adolphus George Frederick, DUKE OF CUMBERLAND, second cousin to her Majesty, born September 21, 1845; married Princess Thyra of Denmark; has issue one daughter.

Augusta Wilhelmina Louisa, DUCHESS OF CAMBRIDGE, daughter of the Landgrave of Hesse and aunt to her Majesty, born July 25, 1797; married, May 7, 1818, the late Duke of Cambridge.

George William Frederick Charles, K.G., DUKE OF CAMBRIDGE, cousin to her Majesty, born March 26, 1819.

Augusta Caroline Charlotte Elizabeth Mary Sophia Louisa, daughter of the late Duke of Cambridge and cousin to her Majesty, born July 19, 1822; married, June 28, 1843, to Frederick, Grand Duke of Mecklenburg-Strelitz, and has issue a son.

Mary Adelaide Wilhelmina Elizabeth, daughter of the late Duke of Cambridge and cousin to her Majesty, born November 27, 1833; married Prince Teck, June 12, 1866; has issue three sons and one daughter.

## LIST OF ADMINISTRATIONS IN THE PRESENT CENTURY.

| Date.         | Prime Minister.    | Duration.  | Chancellor.   | Exchequer.        | Home Secretary.   | Foreign Sec.     |
|---------------|--------------------|------------|---------------|-------------------|-------------------|------------------|
|               |                    | Yrs. Days. |               |                   |                   |                  |
| Dec. 23, 1783 | William Pitt ....  | 17 84      | {Thurlow....  | William Pitt.     | Portland .....    | Grenville.       |
| Mar. 17, 1801 | Hy. Addington ..   | 3 59       | {Loughboro'   | H. Addington.     | Portland, Pelham, | Hawkesbury.      |
|               |                    |            | Eldon.....    |                   | C. Yorke.         |                  |
| May 15, 1804  | William Pitt ....  | 1 272      | Eldon.....    | William Pitt ..   | Hawkesbury....    | {Harrowby.       |
| Feb. 11, 1806 | Lord Grenville ..  | 1 48       | Erskine....   | Lord H. Petty     | Spencer.....      | {Mulgrave.       |
| Mar. 31, 1807 | Duke of Portland   | 2 246      | Eldon.....    | S. Perceval ..    | Hawkesbury....    | {Charles J. Fox. |
| Dec. 2, 1809  | Spencer Perceval   | 2 190      | Eldon.....    | S. Perceval ..    | R. Ryder .....    | {Visct. Howick.  |
| June 9, 1812  | Earl of Liverpool  | 14 319     | Eldon.....    | {N. Vansittart.   | Sidmouth .....    | G. Canning.      |
| Apr. 24, 1827 | George Canning.    | 0 184      | Lyndhurst.    | {F. J. Robinson   | Robert Peel ..... | {Bathurst.       |
| Sept. 5, 1827 | Visct. Goderich..  | 0 142      | Lyndhurst.    | G. Canning ..     | {Sturges Bourne.  | {Wellesley.      |
| Jan. 25, 1828 | D. of Wellington.  | 2 301      | Lyndhurst.    | J. C. Herries.    | Lansdowne ....    | {Castlereagh.    |
| Nov. 22, 1830 | Earl Grey .....    | 3 238      | Brougham.     | H. Goulburn.      | Robert Peel ....  | G. Canning.      |
| July 18, 1834 | Visct. Melbourne   | 0 161      | Brougham.     | Althorp.....      | {Sturges Bourne.  | Dudley.          |
| Dec. 26, 1834 | Sir Robert Peel..  | 0 113      | Lyndhurst.    | Sir R. Peel ..    | {Lansdowne.....   | {Dudley.         |
| Apr. 18, 1835 | Visct. Melbourne   | 6 141      | {In Comm. ..  | T. S. Rice .....  | Lord J. Russell.. | {Aberdeen.       |
| Sept. 6, 1841 | Sir Robert Peel..  | 4 303      | {Cottenham .. | F. T. Barring. .. | Sir J. Graham..   | {Palmerston.     |
| July 6, 1846  | Ld. John Russell   | 5 236      | Lyndhurst.    | H. Goulburn.      | Sir George Grey   | {Granville.      |
| Feb. 27, 1852 | Earl of Derby ..   | 0 305      | {Truro .....  | Sir C. Wood..     | Sir H. Walpole .. | {Malmesbury.     |
| Dec. 28, 1852 | Earl of Aberdeen   | 2 44       | St. Leonards  | B. Disraeli ..    | Palmerston ....   | {Lord J. Russell |
|               |                    |            | Cranworth.    | W. Gladstone.     |                   | {Clarendon.      |
| Feb. 10, 1855 | Lord Palmerston    | 3 15       | Cranworth.    | {W. Gladstone..   | Sir George Grey   | Clarendon.       |
| Feb. 25, 1858 | Earl of Derby ..   | 1 113      | Chelmsford.   | {Sir G. C. Lewis  | S. H. Walpole ..  | Malmesbury.      |
| June 18, 1859 | Lord Palmerston    | 6 141      | {Campbell ..  | B. Disraeli ..    | S. H. Walpole ..  | Russell.         |
| Nov. 6, 1865  | Earl Russell ....  | 0 242      | {Westbury ..  | W. Gladstone.     | {Sir George Grey. | Clarendon.       |
| July 6, 1866  | Earl of Derby ..   | 1 236      | Cranworth.    | W. Gladstone.     | Sir George Grey   | Stanley.         |
| Feb. 27, 1868 | Benjmn. Disraeli   | 0 285      | Chelmsford.   | B. Disraeli ..    | {S. H. Walpole .. | Stanley.         |
| Dec. 9, 1868  | W. E. Gladstone.   | 5 74       | Cairns ....   | G. W. Hunt ..     | G. Hardy .....    | Stanley.         |
| Feb. 21, 1874 | Benjamin Disraeli  | 6 67       | {Hatherley..  | {Robert Lowe..    | {H. A. Bruce .... | {Clarendon.      |
|               | Earl Beaconsfield. |            | {Selborne ..  | {W. Gladstone.    | {Robert Lowe....  | {Granville.      |
| Apr. 28, 1880 | W. E. Gladstone.   | 5 57       | Cairns ....   | S. Northcote .    | R. A. Cross ....  | {Derby.          |
| June 24, 1885 | Mrq. of Salisbury  | 0 227      | Selborne ..   | {W. Gladstone..   | Sir W. Harcourt   | {Salisbury.      |
| Feb. 7, 1886  | W. E. Gladstone.   | 0 139      | Halsbury ..   | {H.C.E. Childers  | R. A. Cross ....  | Granville.       |
| July 24, 1886 | Mrq. of Salisbury  |            | Herschel ..   | Hicks-Beach..     | H. C. E. Childers | Salisbury.       |
|               |                    |            | Halsbury ..   | {Lrd. Churchill.  | H. Matthews ..    | {Idesleigh.      |
|               |                    |            |               | {G. J. Goschen.   |                   | {Salisbury.      |

## THE SALISBURY MINISTRY. PRINCIPAL OFFICERS OF HOUSE OF COMMONS.

## THE SALISBURY MINISTRY.

Prime Minister—Marquis of SALISBURY.  
 First Lord of the Treasury—Right Hon. W. H. SMITH.  
 Lord High Chancellor—Lord HALSBURY.  
 Lord Privy Seal—(Not in the Cabinet).  
 Lord President of the Council—Viscount CRANBROOK.  
 Chancellor of the Exchequer—The Right Hon. G. J. GOSCHEN.

## SECRETARIES OF STATE.

Home—Right Hon. HENRY MATTHEWS, Q.C.  
 War—Right Hon. EDWARD STANHOPE.  
 Foreign—Marquis of SALISBURY.  
 India—Right Hon. Viscount CROSS.  
 The Colonies—Sir HENRY HOLLAND.  
 First Lord of the Admiralty—Right Hon. Lord GEORGE HAMILTON.  
 Secretary—A. B. FORWOOD, Esq.  
 President of the Board of Trade—Right Hon. Lord STANLEY OF PRESTON.  
 President of the Local Government Board—Right Hon. CHARLES T. RITCHIE.  
 Postmaster-General—Right Hon. CECIL RAIKES.  
 Lord-Lieutenant of Ireland—Marquis of LONDONDERRY.  
 Lord Chancellor of Ireland—Lord ASHBOURNE.  
 Lord Advocate of Scotland—Right Hon. J. H. A. MACDONALD, Q.C.  
 Chief Secretary for Ireland—Right Hon. ARTHUR JAMES BALFOUR.  
 Chancellor of the Duchy of Lancaster—Right Hon. Lord JOHN MANNERS.  
 Junior Lords of the Treasury—H. S. HERBERT, Colonel WALBROND, and  
 Sir HERBERT MAXWELL.  
 Attorney-General for England—Sir R. WEBSTER, Q.C.  
 Solicitor-General for England—Sir EDWARD CLARKE, Q.C.

## PRINCIPAL OFFICERS OF HOUSE OF COMMONS.

Clerk of the House of Commons—R. F. D. PALGRAVE, Esq.  
 Clerk Assistant—A. MILMAN, Esq. Second Ditto—F. B. G. JENKINSON, Esq.  
 PRINCIPAL CLERKS.—Public Bills and Fees, W. A. FERGUSON-DAVIE, Esq.;  
 Committee Office, G. J. STONE, Esq.; Clerk of the Journals, JAMES B. BULL, Esq.;  
 Private Bill Office, FELIX H. WEBBER, Esq.  
 Senior Clerks—C. E. A. LEIGH, W. M. MOLYNEUX, G. LAUGHTON, W. GIBBONS,  
 E. H. LEY, C. FORSTER, Esqrs.  
 Examiners of Petitions for Private Bills—J. H. ROBINSON, C. W. CAMPION, Esqrs.  
 Clerk to Examiners and Taxing Master—F. ST. G. TUPPER, Esq.  
 Librarian—R. C. WALPOLE, Esq.  
 Serjeant-at-Arms—H. D. ERSKINE, Esq.  
 Accountant—W. O. MAYNE. Shorthand Writer—W. H. G. SALTER, Esq.



## PRINCIPAL OFFICERS OF HOUSE OF PEERS.

Chairman of Committees—DUKE OF BUCKINGHAM, G.C.S.I.  
 Clerk of the Parliament—HENRY J. L. GRAHAM, Esq.  
 Deputy Clerk of Parliaments—RALPH DISRAELI, Esq.  
 Reading Clerk and Clerk of Private Committees—HON. S. BETHELL.  
 Counsel to Chairman of Committees—JOSEPH H. WARNER, Esq.  
 Chief Clerk—E. M. PARRATT, Esq.

## SENIOR CLERKS.

W. H. HAINES, Esq., Principal Clerk, Private Bill Office.  
 O. C. GRANT, Esq., Principal Clerk of Private Committees.  
 M. A. THOMAS, Esq., Peers' Printed Paper Office.  
 A. W. DUBOURG, Esq., Principal Clerk, Judicial Department.  
 E. J. WEBB, Esq., Clerk of the Journals.  
 Clerk attending the Table—A. HARRISON, Esq.  
 Principal Clerk for Bills—C. W. MONRO, Esq.

## PRIME MINISTERS FOR FIFTY-FOUR YEARS.

|                          |                   |                                |                         |
|--------------------------|-------------------|--------------------------------|-------------------------|
| Sir Robert Peel ....     | December 15, 1834 | Earl of Derby .....            | July 8, 1866            |
| Viscount Melbourne.....  | April 18, 1835    | Mr. Disraeli..                 | March to December, 1868 |
| Sir Robert Peel .....    | August 31, 1841   | Mr. Gladstone .....            | December 9, 1868        |
| Lord John Russell .....  | July 6, 1846      | Earl Beaconsfield ....         | February 21, 1874       |
| Earl of Derby .....      | February 27, 1852 | Mr. Gladstone .....            | April 29, 1880          |
| Earl of Aberdeen....     | December 28, 1852 | and Ch. of Ex. to April, 1883. |                         |
| Viscount Palmerston..    | February 26, 1855 | Marquess of Salisbury....      | June 24, 1885           |
| Earl of Derby .....      | February 26, 1858 | Mr. Gladstone.....             | February 2, 1886        |
| Viscount Palmerston .... | June 18, 1859     | Marquess of Salisbury ..       | August 3, 1886          |
| Earl Russell.....        | October 28, 1865  |                                |                         |

Nineteen changes of Governments have taken place in the last fifty-four years, but in that time only nine men have been Premiers, and of these Mr. Gladstone and the Marquess of Salisbury are the sole survivors. Mr. Gladstone has been Premier longer than any other statesman since the Earl of Liverpool, who held office nearly fifteen years in succession.

In 1885 the number of members of the Lower House was finally fixed at 670, as against 658 in previous years; England returning 465, Wales 30, Scotland 72, and Ireland 103 members. The previous distribution had been—England 469, Wales 30, Scotland 60, and Ireland 103 seats. There are now 377 county members, as against 283; 284 borough members, as against 360; and 9 University members, as against 9.

## THE CABINET. PAYMENTS TO THE ROYAL FAMILY.

The last Parliament consists of 670 members, who were elected by 642 constituencies, inclusive of 226 whose return was unopposed. The parties of the House are thus divided:—The Conservatives and Dissentient Liberals combined, numbering 389, have a majority of 108 over Liberals and Parnellites, who together number 281. The Liberals and Dissentient Liberals number 269, a minority of 49, as compared with the Conservatives. The Liberals, Dissentient Liberals, and Parnellites combined number 354, a majority of 38 over the Conservatives.

## THE CABINET.

| Office.                              | Minister.                          | Age. |
|--------------------------------------|------------------------------------|------|
| Prime Minister .....                 | Lord SALISBURY .....£5,000....     | 57   |
| First Lord of the Treasury .....     | Right Hon. W. H. SMITH.. 5,000.... | 62   |
| Lord Chancellor .....                | Lord HALSBURY.....10,000....       | 62   |
| President of the Council .....       | Lord CRANBROOK ..... 2,000....     | 73   |
| Chancellor of the Exchequer .....    | Right Hon. G. J. GOSCHEN 5,000.... | 56   |
| Foreign Secretary.....               | Lord SALISBURY ..... 5,000....     | —    |
| Home Secretary .....                 | Right Hon. H. MATTHEWS 5,000....   | 61   |
| Colonial Secretary .....             | Sir H. HOLLAND ..... 5,000....     | 62   |
| Indian Secretary .....               | Lord CROSS ..... 5,000....         | 64   |
| War Secretary .....                  | Right Hon. E. STANHOPE 5,000....   | 47   |
| First Lord of the Admiralty .....    | Lord G. HAMILTON ..... 4,500....   | 42   |
| Chief Secretary for Ireland.....     | Right Hon. A. J. BALFOUR 4,425.... | 40   |
| Lord Chancellor for Ireland .....    | Lord ASHBOURNE ..... 8,000....     | 49   |
| President of the Board of Trade .... | Lord STANLEY OF PRESTON. 2,000.... | 46   |
| Chancellor of the Duchy .....        | Lord JOHN MANNERS .... 2,000....   | 69   |
| Secretary for Scotland.....          | Marquis of LOTHIAN..... 2,000....  | 55   |
|                                      | Average Age.....                   | 61   |

## PAYMENTS TO THE ROYAL FAMILY.

|                                                                                                                                                                                                            | Per Year.<br>£ |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Her Majesty the Queen—Privy Purse .....                                                                                                                                                                    | 65,000         |
| Salaries of Household .....                                                                                                                                                                                | 132,000        |
| Expenses of Household .....                                                                                                                                                                                | 173,000        |
| Royal Bounties .....                                                                                                                                                                                       | 14,000         |
| Unappropriated sums from Duchy of Lancaster, savings, &c.,<br>probably £55,000 a year, equal in all to about £500,000 a<br>year, enjoyed for forty-nine years, and amounting to upwards<br>of £24,500,000. |                |
| H.R.H. the Prince of Wales .....                                                                                                                                                                           | 40,000         |
| H.R.H. the Princess of Wales.....                                                                                                                                                                          | 10,000         |
| H.R.H. the Crown Princess of Prussia .....                                                                                                                                                                 | 8,000          |
| H.R.H. the Duke of Edinburgh.....                                                                                                                                                                          | 25,000         |
| H.R.H. Princess Christian of Schleswig-Holstein .....                                                                                                                                                      | 6,000          |
| H.R.H. Princess Louise (Marchioness of Lorne).....                                                                                                                                                         | 6,000          |



PARLIAMENTS OF THE UNITED KINGDOM. PRINCIPAL SOVEREIGNS OF EUROPE, ETC.

|                                                   |                      |
|---------------------------------------------------|----------------------|
| H.R.H. the Duke of Connaught.....                 | Per Year.<br>£25,000 |
| H.R.H. the Duchess of Cambridge.....              | 6,000                |
| H.R.H. the Duchess of Mecklenburgh-Strelitz ..... | 3,000                |
| H.R.H. the Duke of Cambridge .....                | 12,000               |
| In addition to military pay and other emoluments. |                      |
| H.R.H. Duchess of Teck.....                       | 3,000                |
| H.R.H. Princess Henry of Battenberg .....         | 6,000                |

PARLIAMENTS OF THE UNITED KINGDOM.

|    | Assembled.      | Dissolved.     | Duration.  |           | Assembled.     | Dissolved.     | Duration.  |
|----|-----------------|----------------|------------|-----------|----------------|----------------|------------|
|    | GEORGE III.     |                | Yrs. m. d. |           | WILLIAM IV.    |                | Yrs. m. d. |
| 1  | Sept. 27, 1796* | June 29, 1802  | 5 9 2      | 11        | Jan. 29, 1833  | Dec. 30, 1834  | 1 11 1     |
| 2  | Oct. 29, 1802   | Oct. 25, 1806  | 3 11 27    | 12        | Feb. 19, 1835  | July 17, 1837  | 2 4 28     |
| 3  | Dec. 15, 1806   | April 23, 1807 | 0 4 14     | VICTORIA. |                |                |            |
| 4  | June 22, 1807   | Sept. 29, 1812 | 5 3 7      | 13        | Nov. 15, 1837  | June 23, 1841  | 3 7 8      |
| 5  | Nov. 24, 1812   | June 10, 1818  | 5 6 16     | 14        | Aug. 19, 1841  | July 23, 1847  | 5 11 4     |
| 6  | Jan. 14, 1819   | Feb. 29, 1820  | 1 1 15     | 15        | Nov. 18, 1847  | July 1, 1852   | 4 7 13     |
|    |                 |                |            | 16        | Nov. 4, 1852   | Mar. 21, 1857  | 4 4 17     |
|    | GEORGE IV.      |                |            | 17        | April 30, 1857 | April 23, 1859 | 1 11 23    |
| 7  | April 23, 1820  | June 2, 1826   | 6 1 9      | 18        | May 31, 1859   | July 6, 1865   | 6 1 6      |
| 8  | Nov. 14, 1826   | July 24, 1830  | 3 8 10     | 19        | Feb. 1, 1866   | Nov. 11, 1868  | 2 9 10     |
|    |                 |                |            | 20        | Dec. 10, 1868  | Jan. 26, 1874  | 5 1 16     |
|    | WILLIAM IV.     |                |            | 21        | Mar. 5, 1874   | Mar. 25, 1880  | 6 0 20     |
| 9  | Oct. 26, 1830   | April 22, 1831 | 0 5 27     | 22        | April 29, 1880 | Nov. 18, 1885  | 5 6 20     |
| 10 | June 14, 1831   | Dec. 3, 1832   | 1 5 9      | 23        | Jan. 12, 1886  | June 25, 1886  | 0 5 5      |
|    |                 |                |            | 24        | Aug. 5, 1886   |                |            |

\* Parliament first met after the Union with Ireland, Jan. 22, 1801.

PRINCIPAL SOVEREIGNS OF EUROPE, &c.

| Countries.             | Sovereigns.              | When Born.     | Began to Reign. |
|------------------------|--------------------------|----------------|-----------------|
| England, &c. ....      | VICTORIA .....           | May 24..1819   | June 20..1837   |
| France (Republic) .... | F. P. J. Grévy (Pres.).. | Aug. 15..1813  | Feb. 1..1879    |
| Russia .....           | Alexander III.....       | Mar. 10..1845  | Mar. 13..1881   |
| Austria .....          | Francis Joseph .....     | Aug. 18..1830  | Dec. 2..1848    |
| Germany .....          | William .....            | Mar. 22..1797  | Jan. 2..1861    |
| Bavaria .....          |                          |                |                 |
| Belgium .....          | Leopold II.....          | April 9..1835  | Dec. 10..1865   |
| Brazil (South America) | Pedro II.....            | Dec. 2..1825   | April 7..1831   |
| Denmark.....           | Christian IX. ....       | April 8..1818  | Nov. 15..1863   |
| Greece.....            | George .....             | Dec. 24..1845  | June 6..1863    |
| Italy .....            | Humbert .....            | Mar. 14..1844  | Jan. 9..1878    |
| Holland .....          | William III.....         | Feb. 19..1817  | Mar. 17..1849   |
| Ottoman Empire ....    | Abdul Hamid II. ....     | Sept. 20..1842 | Aug. 30..1876   |
| Portugal .....         | Louis .....              | Oct. 31..1838  | Nov. 11..1861   |
| Saxony .....           | Albert .....             | April 23..1828 | Oct. 29..1873   |
| Spain .....            |                          |                |                 |
| Sweden and Norway ..   | Oscar II.....            | Jan. 21..1829  | Sept. 20..1872  |
| United States (Amer.)  | Grov. Cleveland (Pres.)  | Mar. 18..1837  | Mar. 4..1885    |
| Wurtemberg .....       | Charles .....            | Mar. 6..1823   | June 25..1864   |

## PRESIDENTS OF THE UNITED STATES OF AMERICA.

|                                                                 | YEAR.          |
|-----------------------------------------------------------------|----------------|
| <i>Declaration of Independence</i> .....                        | 4th July, 1776 |
| General Washington first President .....                        | 1789 and 1793  |
| John Adams .....                                                | 1797           |
| Thomas Jefferson.....                                           | 1801 and 1805  |
| James Madison.....                                              | 1809 and 1813  |
| James Monroe .....                                              | 1817 and 1821  |
| John Quincy Adams .....                                         | 1825           |
| Gen. Andrew Jackson .....                                       | 1829 and 1833  |
| Martin Van Buren.....                                           | 1837           |
| Gen. William Henry Harrison (died 4th April).....               | 1841           |
| John Tyler (previously Vice-President) .....                    | 1841           |
| James Knox Polk .....                                           | 1845           |
| General Zachary Taylor (died 9th July, 1850) .....              | 1849           |
| Millard Fillmore (previously Vice-President).....               | 1850           |
| General Franklin Pierce .....                                   | 1853           |
| James Buchanan .....                                            | 1857           |
| Abraham Lincoln (Assassinated 14th April, 1865) .....           | 1861 and 1865  |
| Andrew Johnson (previously Vice-President).....                 | 1865           |
| General Ulysses S. Grant .....                                  | 1869 and 1873  |
| Rutherford Birchard Hayes, after long contest with Tilden ..... | 1877           |
| General Garfield (Shot July 2; died September 19) .....         | 1881           |
| Chester A. Arthur, Vice-President, succeeded September 20 ..... | 1881           |
| Grover Cleveland .....                                          | 1885           |

The United States of America form a Federal Republic, consisting of 38 partially independent States, divisible as follows:—6 Eastern, or New England, 4 Middle, 10 Southern, 18 Western; and 1 Federal district, and 8 organised Territories, the centre of North America.

The area in English square miles is estimated at 5,034,459, or 1,942,053,760 acres, exclusive of the vast district of Alaska, comprising 369,529,600 acres. One-fourth only is civilised.

The estimated population of the whole of the Territories, including the States, is about 57,000,000. The increase in the ten years, 1870—1880, was 11,594,795.



## FOREIGN MONEYS AND THEIR ENGLISH EQUIVALENTS.

| COUNTRY.                    | GOLD COINS.<br>Denomination.     | Sterling<br>Value. | SILVER COINS.<br>Denomination.                  | 60 <i>d.</i> , i.e.<br>Gold to Silver<br>as 15 <i>s</i> is to 1 <i>l</i> . |
|-----------------------------|----------------------------------|--------------------|-------------------------------------------------|----------------------------------------------------------------------------|
|                             |                                  | £ s. d.            |                                                 | s. d.                                                                      |
| *America .....              | See United States .....          |                    |                                                 |                                                                            |
| *Austro-Hungary .....       | Ducat .....                      | 0 9 4              | <i>Florin or gulden</i> of 100 krentzer.....    | 1 11½                                                                      |
|                             | 8-florin or gulden piece .....   | 0 15 10½           | ½-florin .....                                  | 0 5½                                                                       |
| *Belgium .....              | See France, and footnote ..      |                    |                                                 |                                                                            |
| Brazil .....                | 10 milreis .....                 | 1 2 5½             | 1 milreis of 1,000 reis .....                   | 2 0½                                                                       |
| Chili, Colombia, Uruguay .. | doubloon or 5-peso piece .....   | 0 18 9             | 1 peso of 100 centavos .....                    | 3 11½                                                                      |
| China .....                 |                                  |                    | Tael of 10 mace or 100 canderin or 1000 cash .. | 6 6½                                                                       |
| *Denmark .....              | 10-crown piece .....             | 0 11 0½            | 1 crown of 100 öre .....                        | 1 0½                                                                       |
| Egypt .....                 | 100-piastre piece .....          | 1 0 5              | 1 piastre of 40 paras .....                     | 0 2½                                                                       |
| Finland .....               | 10-markkaa piece .....           | 0 7 11½            | 1 mark of 100 penni .....                       | 0 9½                                                                       |
| *France .....               | 10-franc piece .....             | 0 7 11½            | 5-franc piece .....                             | 3 11½                                                                      |
|                             |                                  |                    | 1 franc of 100 centimes .....                   | 0 8½                                                                       |
| *German Empire .....        | Crown of 10 reichsmarks.....     | 0 9 5½             | 1 reichsmark of 100 pfennige.....               | 0 10½                                                                      |
| *Great Britain .....        | Sovereign of 20 shillings.....   | 1 0 0              | Crown of 5 shillings .....                      | 4 7                                                                        |
|                             |                                  |                    | Shilling of 12 pence .....                      | 0 11                                                                       |
| *Greece .....               | See France, and footnote ..      |                    |                                                 |                                                                            |
| *Holland and Java .....     | Ducat .....                      | 0 9 4½             | Rixdaler of 2½ florins .....                    | 4 2                                                                        |
|                             | 10-florin piece .....            | 0 16 6½            | <i>Florin</i> of 100 cents .....                | 1 8                                                                        |
| India .....                 | Mohur of 15 rupees .....         | 1 9 2½             | Rupee of 16 annas, 64 pice, or 192 pies ..      | 1 10½                                                                      |
| *Italy .....                | See France, and footnote ..      |                    |                                                 |                                                                            |
| Japan .....                 | 10-yen piece .....               | 2 0 11½            | 1 yen of 100 sen .....                          | 4 8½                                                                       |
| Mexico .....                | 10-peso piece .....              | 2 0 5½             | 1 peso of 100 centavos .....                    | 4 8½                                                                       |
| *Netherlands .....          | See Holland .....                |                    |                                                 |                                                                            |
| *Norway and Sweden .....    | See Denmark, and footnote ..     |                    |                                                 |                                                                            |
| Ottoman Empire .....        | Turkish pound of 100 piastres .. | 0 18 0½            | 1 piastre of 40 paras .....                     | 0 2                                                                        |
| Persia .....                | Toman of 10 krans .....          | 0 9 5              | Kran 20 shahis .....                            | 0 10                                                                       |
| Peru and Venezuela .....    | 10-sol piece .....               | 1 19 7½            | Sol of 10 dineros or 100 cents .....            | 3 11½                                                                      |
| *Portugal .....             | Crown of 10 milreis .....        | 2 4 4½             | <i>Teston</i> of 100 reis .....                 | 0 4½                                                                       |
| *Prussia .....              | See German Empire .....          |                    |                                                 |                                                                            |
| Roumania .....              | See France, and footnote ..      |                    |                                                 |                                                                            |
| Russia .....                | 3-rouble piece .....             | 0 9 10             | (Rouble of 100 kopecks .....                    | 3 2                                                                        |
| Servia and Bulgaria .....   | See France, and footnote ..      |                    | <i>Tchevertak</i> or ½ rouble .....             | 0 9½                                                                       |
| *Spain .....                | Doubloon of 10 escudos .....     | 1 0 7½             | Escudos (or ½ dollar) of 10 reals .....         | 2 0½                                                                       |
|                             | 25-peseta piece .....            | 0 19 10½           | Peseta of 100 centimos .....                    | 0 8½                                                                       |
| *Switzerland .....          | See France, and footnote ..      |                    |                                                 |                                                                            |
| Tunis .....                 | 10-piastre piece .....           | 0 4 9½             | Piastre .....                                   | 0 5½                                                                       |
| Turkey .....                | See Ottoman Empire .....         |                    | Trade dollar .....                              | 4 8½                                                                       |
| *United States .....        | Eagle of 10 dollars .....        | 2 1 1½             | Dollar of 100 cents .....                       | 4 2½                                                                       |
| Uruguay .....               | See Chili, and footnote .....    |                    | ½ dollar of 50 cents .....                      | 1 11½                                                                      |
| Venezuela .....             | See Peru, and footnote .....     |                    |                                                 |                                                                            |

Intrinsic Value with Silver per Troy Ounce.

EXPLANATORY NOTES.—France, Belgium, Italy, Greece, and Switzerland constitute what is known as the "Latin" Union, and their coins are alike in weight and fineness, occasionally differing, however, in name. The same system has been in part adopted by Spain, Servia, Bulgaria, Russia, Finland, and Roumania, but they have not joined the Union. Francs and centimes of France, Belgium, and Switzerland are respectively designated lire and centesimi in Italy; drachmai and lepta in Greece; dinars and paras in Servia; pesetas and centimos in Spain; leys and banis in Roumania; levas and stotinkis in Bulgaria. Similarly the Scandinavian countries, Norway, Sweden, and Denmark, employ coins of the same weight and fineness, their names being also alike. The Venezolano (of 10 decimos) of Venezuela and the sol (of 10 dineros) of Peru are alike interchangeable, as also are the peso of Chili, Colombia, and Uruguay.

In all British colonies, English money of every denomination is current. The exchange value of the money of those countries indicated by a \* is determined by the rate of exchange for the day, and may be taken as approximately that given in the last column. The rate given in the daily papers generally represents the number of the standard coins (those printed in italics) that are equivalent to one sovereign. The Spanish rate is given in terms of the old dollar (= 2 escudos). The exchange value of the rupees depends on the rate for "India Council Bills." In all "bi-metallic" countries pure gold is taken as being worth 15½ times its weight of pure silver. This proportion corresponds to giving standard silver a constant value of 60½*d.*, as in the last column of the table.

## THE ENGLISH MILE COMPARED WITH OTHER EUROPEAN MEASURES.

|                           | English<br>Stat. Mile. | English<br>Geog. Mile. | French<br>Kilomètre. | German<br>Geog. Mile. | Russian<br>Verst. | Austrian<br>Mile. | Dutch<br>Ure. | Norwegian<br>Mile. | Swedish<br>Mile. | Danish<br>Mile. | Swiss<br>Stunde. |
|---------------------------|------------------------|------------------------|----------------------|-----------------------|-------------------|-------------------|---------------|--------------------|------------------|-----------------|------------------|
| English Statute Mile .... | 1·000                  | 0·867                  | 1·609                | 0·217                 | 1·508             | 0·212             | 0·289         | 0·142              | 0·151            | 0·213           | 0·335            |
| English Geog. Mile .....  | 1·153                  | 1·000                  | 1·855                | 0·250                 | 1·783             | 0·245             | 0·333         | 0·164              | 0·169            | 0·246           | 0·386            |
| Kilomètre .....           | 0·621                  | 0·540                  | 1·000                | 0·135                 | 0·937             | 0·133             | 0·180         | 0·088              | 0·094            | 0·133           | 0·203            |
| German Geog. Mile .....   | 4·610                  | 4·000                  | 7·420                | 1·000                 | 6·953             | 0·978             | 1·333         | 0·667              | 0·694            | 0·985           | 1·543            |
| Russian Verst .....       | 0·662                  | 0·575                  | 1·067                | 0·144                 | 1·000             | 0·141             | 0·192         | 0·094              | 0·100            | 0·142           | 0·222            |
| Austrian Mile .....       | 4·714                  | 4·089                  | 7·586                | 1·022                 | 7·112             | 1·000             | 1·363         | 0·672              | 0·710            | 1·006           | 1·578            |
| Dutch Ure .....           | 3·458                  | 3·000                  | 5·565                | 0·750                 | 5·215             | 0·734             | 1·000         | 0·495              | 0·520            | 0·738           | 1·157            |
| Norwegian Mile .....      | 7·021                  | 6·091                  | 11·299               | 1·523                 | 10·589            | 1·489             | 2·035         | 1·000              | 1·057            | 1·499           | 2·350            |
| Swedish Mile .....        | 6·644                  | 5·764                  | 10·692               | 1·441                 | 10·019            | 1·409             | 1·921         | 0·948              | 1·000            | 1·419           | 2·224            |
| Danish Mile .....         | 4·682                  | 4·002                  | 7·536                | 1·016                 | 7·078             | 0·994             | 1·354         | 0·667              | 0·705            | 1·080           | 1·667            |
| Swiss Stunde .....        | 2·987                  | 2·592                  | 4·808                | 0·648                 | 4·505             | 0·634             | 0·864         | 0·425              | 0·449            | 0·638           | 1·000            |

AN ALPHABETICAL LIST  
OF THE  
LORDS SPIRITUAL AND TEMPORAL  
IN THE  
SECOND SESSION OF THE TWENTY-FOURTH PARLIAMENT  
OF THE  
UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.

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| NAME.                                                                    | NAME.                                                                    |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Abercorn, James Marquess of. ( <i>Duke of Abercorn.</i> )                | Ashford, William Coutts Lord. ( <i>Viscount Bury.</i> )                  |
| Abercromby, George Ralph Lord.                                           | Auckland, William George Lord.                                           |
| Aberdare, Henry Austin Lord.                                             | Aveland, Gilbert Henry Lord.                                             |
| Abergavenny, William Marquess of.                                        | Aylesford, Charles Wightwick Earl of.                                    |
| Abingdon, Montagu Arthur Earl of.                                        |                                                                          |
| Abinger, William Frederick Lord.                                         | Bagot, William Lord.                                                     |
| Acton, John Emerich Edward Lord.                                         | Balinhard, Jas. Lord. ( <i>Earl of Southesk.</i> )                       |
| Ailesbury, Ernest Augustus Charles Marquess of.                          | Balfour of Burley, Alexander Hugh Lord. ( <i>Elected for Scotland.</i> ) |
| Ailsa, Archibald Marquess of.                                            | Bandon, James Francis Earl of. ( <i>Elected for Ireland.</i> )           |
| Airlie, David Stanley William Earl of. ( <i>Elected for Scotland.</i> )  | Bangor, Henry William Crosbie Viscount. ( <i>Elected for Ireland.</i> )  |
| Albany, His Royal Highness Leopold Charles Edward George Albert Duke of. | Bangor, James Colquhoun Bishop of.                                       |
| Albemarle, George Thomas Earl of.                                        | Barrogill, George Philips Alexander Lord. ( <i>Earl of Caithness.</i> )  |
| Alcester, Frederick Beauchamp Paget Lord.                                | Bateman, William Bateman Lord.                                           |
| Alington, Henry Gerard Lord.                                             | Bath, John Alexander Marquess of.                                        |
| Amherst, William Archer Earl.                                            | Bath and Wells, Arthur Charles Bishop of.                                |
| Amphill, Arthur Oliver Villiers Lord.                                    | Bathurst, Allen Alexander Earl.                                          |
| Anglesey, Henry Marquess of.                                             | Beauchamp, Frederick Earl.                                               |
| Annaly, Luke George Lord.                                                | Beaufort, Henry Charles Fitzroy Duke of.                                 |
| Annesley, Hugh Earl. ( <i>Elected for Ireland.</i> )                     | Beaumont, Henry Lord.                                                    |
| Ardilaun, Arthur Edward Lord.                                            | Bedford, Francis Chas. Hastings Duke of.                                 |
| Arundell of Wardour, John Francis Lord.                                  | Belmore, Somerset Richard Earl of. ( <i>Elected for Ireland.</i> )       |
| Ashbourne, Edward Lord.                                                  | Belper, Henry Lord.                                                      |
| Ashburnham, Bertram Earl of.                                             | Berkeley, ——— Earl of.                                                   |
| Ashburton, Alexander Hugh Lord.                                          | Berwick, Richard Henry Lord.                                             |
|                                                                          | Blachford, Frederic Lord.                                                |



## HOUSE OF LORDS.

NAME.  
 Blackburn, Colin Lord. (*A Lord of Appeal in Ordinary.*)  
 Blantyre, Charles Lord. (*Elected for Scotland.*)  
 Bolingbroke and St. John, Henry Viscount.  
 Bolton, William Henry Lord.  
 Boston, George Florance Lord.  
 Botreaux, Charles Edward Hastings Lord. (*Earl of Loudoun.*)  
 Boyle, Richard Edmund Saint Lawrence Lord. (*Earl of Cork and Orrery.*)  
 Brabourne, Edward Hugessen Lord.  
 Bradford, Orlando George Chas. Earl of.  
 Bramwell, George William Wilshire Lord.  
 Brancepeth, Gustavus Russell Lord. (*Viscount Boyne.*)  
 Brandon, Wm. Alexander Louis Stephen Duke of. (*Duke of Hamilton.*)  
 Brassey, Thomas Lord.  
 Braybrooke, Charles Cornwallis Lord.  
 Braye, Alfred Thomas Townshend Lord.  
 Breadalbane, Gavin Marquess of.  
 Bridport, Alexander Nelson Viscount.  
 Bristol, Frederick Wm. John Marquess of.  
 Brodrick, William Lord. (*Viscount Midleton.*)  
 Brooke, George Guy Earl, and Earl of Warwick.  
 Brougham and Vaux, Henry Chas. Lord.  
 Brownlow, Adelbert Wellington Brownlow Earl.  
 Buckingham and Chandos, Richard Plantagenet Campbell Duke of.  
 Buckinghamshire, Sidney Carr Earl of.  
 Burton, Michael Arthur Lord.  
 Bute, John Patrick Marquess of.  
 Byron, George Frederick William Lord.  
 Cadogan, George Henry Earl. (*Lord Privy Seal.*)  
 Cairns, Arthur William Earl.  
 Caledon, James Earl of. (*Elected for Ireland.*)  
 Calthorpe, Frederick Henry William Lord.

NAME.  
 Cambridge, His Royal Highness George William Frederick Charles Duke of.  
 Camden, John Charles Marquess.  
 Camoys, Francis Robert Lord.  
 Camperdown, Robert Adam Philips Haldane Earl of.  
 Canterbury, Edward White Archbishop of.  
 Canterbury, Henry Charles Viscount.  
 Carew, Robert Shapland George Julian Lord.  
 Carleton, Henry Bentinck Lord. (*Earl of Shannon.*)  
 Carlingford, Chichester Samuel Lord.  
 Carlisle, William George Earl of.  
 Carlisle, Harvey Bishop of.  
 Carnarvon, Henry Howard Molyneux Earl of.  
 Carrington, Charles Robert Lord.  
 Carysfort, William Lord. (*Earl of Carysfort.*)  
 Castlemaine, Richard Lord. (*Elected for Ireland.*)  
 Castletown, Bernard Edward Barnaby Lord.  
 Cathcart, Alan Frederick Earl.  
 Cawdor, John Frederick Vaughan Earl.  
 Charlemont, James Molyneux Lord. (*Earl of Charlemont.*)  
 Chaworth, William Lord. (*Earl of Meath.*)  
 Chelmsford, Frederick Augustus Lord.  
 Chesham, Charles Compton William Lord.  
 Chester, William Bishop of.  
 Chesterfield, Hy. Edwyn Chandos Earl of.  
 Chichester, Walter John Earl of.  
 Chichester, Richard Bishop of.  
 Cholmondeley, George Henry Hugh Marquess of.  
 Churchill, Francis George Lord.  
 Churston, John Lord.  
 Clanbrassill, John Strange Lord. (*Earl of Roden.*)  
 Clancarty, Richard Somerset Viscount. (*Earl of Clancarty.*)

## HOUSE OF LORDS.

NAME.  
 Clanwilliam, Richard James Lord. (*Earl of Clanwilliam.*)  
 Clarendon, Edward Hyde Earl of.  
 Clements, Robert Bermingham Lord. (*Earl of Leitrim.*)  
 Clermont, Thomas Lord  
 Cleveland, Harry George Duke of.  
 Clifford of Chudleigh, Lewis Henry Hugh Lord.  
 Clifton, John Stuart Lord. (*Earl of Darnley.*)  
 Clinton, Charles Henry Rolle Lord.  
 Clonbrock, Robert Lord. (*Elected for Ireland.*)  
 Cloncurry, Valentine Frederick Lord.  
 Clonmell, John Henry Reginald Earl of. (*Elected for Ireland.*)  
 Colchester, Reginald Charles Edwd. Lord.  
 Coleridge, John Duke Lord.  
 Colville of Culross, Charles John Lord.  
 Combermere, Wellington Henry Viscount.  
 Congleton, Henry William Lord.  
 Connaught and Strathearn, His Royal Highness Arthur William Patrick Albert Duke of.  
 Conyers, Sackville George Lord.  
 Cottenham, Kenelm Charles Ewd. Earl of.  
 Cottesloe, Thomas Francis Lord.  
 Coventry, George William Earl of.  
 Cowley, William Henry Earl.  
 Cowper, Francis Thomas de Grey Earl.  
 Cranbrook, Gathorne Viscount. (*Lord President of the Council.*)  
 Craven, William George Robert Earl of.  
 Crewe, Hungerford Lord.  
 Crofton, Edward Henry Churchill Lord. (*Elected for Ireland.*)  
 Cross, Richard Assheton Viscount.  
 Cumberland and Teviotdale, His Royal Highness Ernest Augustus William Adolphus George Frederick Duke of.  
 Dacre, Thomas Crosby William Lord.  
 Dartmouth, William Walter Earl of.

NAME.  
 Dartrey, Richard Earl of.  
 De Clifford, Edward Southwell Lord.  
 De Freyne, Arthur Lord.  
 De la Warr, Reginald Windsor Earl.  
 De L'Isle and Dudley, Philip Lord.  
 De Mauley, Charles Frederick Ashley Cooper Lord.  
 De Ros, Dudley Charles Lord.  
 De Saumarez, John St. Vincent Lord.  
 De Tabley, George Lord.  
 De Vesci, John Robert William Lord. (*Viscount de Vesci.*)  
 Delamere, Hugh Lord.  
 Denbigh, Rudolph William Basil Earl of.  
 Denman, Thomas Lord.  
 Deramore, Thomas Lord.  
 Derby, Edward Henry Earl of.  
 Derwent, Harcourt Lord.  
 Devon, William Reginald Earl of.  
 Devonshire, William Duke of.  
 Digby, Edward St. Vincent Lord.  
 Dinevor, Arthur de Cardonnel Lord.  
 Doncaster, William Henry Walter Earl of. (*Duke of Buccleuch and Queensberry.*)  
 Doneraile, Hayes Viscount. (*Elected for Ireland.*)  
 Donington, Charles Frederick Lord.  
 Dorchester, Dudley Wilmot Lord.  
 Dormer, John Baptist Joseph Lord.  
 Douglas, Charles Alexander Lord. (*Earl of Home.*)  
 Ducie, Henry John Earl of.  
 Dudley, William Humble Earl of.  
 Dufferin, Frederick Temple Earl of.  
 Dundonald, Douglas Mackinnon Baillie Hamilton Earl of. (*Elected for Scotland.*)  
 Dunmore, Charles Adolphus Lord. (*Earl of Dunmore.*)  
 Dunning, John Lord. (*Lord Rollo.*)  
 Dunsandle and Clanconal, Denis St. George Lord. (*Elected for Ireland.*)  
 Dunsany, Edward Lord. (*Elected for Ireland.*)



## HOUSE OF LORDS.

## NAME.

Durham, John George Earl of.  
 Durham, Joseph Barber Bishop of.

Ebury, Robert Lord.

Edinburgh, His Royal Highness Alfred  
 Ernest Albert Duke of.

Effingham, Henry Earl of.

Egerton, Wilbraham Lord.

Eldon, John Earl of.

Elgin, Victor Alexander Lord. (*Earl of  
 Elgin and Kincardine.*)

Ellenborough, Charles Edmund Lord

Ellesmere, Francis Charles Granville  
 Earl of.

Elphinstone, William Buller Fullerton  
 Lord.

Emly, William Lord.

Erskine, William Macnaghten Lord.

Esher, William Baliol Lord.

Essex, Arthur Algernon Earl of.

Ettrick, Francis Lord. (*Lord Napier.*)

Eversley, Charles Viscount.

Exeter, William Alleyne Marquess of.

Exmouth, Edward Fleetwood John  
 Viscount.

Falmouth, Evelyn Viscount.

Fermanagh, John Henry Lord. (*Earl  
 Erne.*)

Ferrers, Sewallis Edward Earl.

Feversham, William Ernest Earl of.

Fife, Alexander William George Earl of.

Fingall, Arthur James Francis Lord.  
 (*Earl of Fingall.*)

Fisherwick, Edward Lord. (*Marquess of  
 Donegall.*)

Fitz Gerald, John David Lord. (*A Lord  
 of Appeal in Ordinary.*)

Fitzhardinge, Francis Wm. Fitzhardinge  
 Lord.

Fitzwilliam, Wm. Thomas Spencer, Earl.

Foley, Henry Thomas Lord.

Forbes, Horace Courtenay Gammell Lord.  
 (*Elected for Scotland.*)

## NAME.

Forester, Orlando Watkin Weld Lord.

Fortescue, Hugh Earl.

Foxford, William Hale John Charles  
 Lord. (*Earl of Limerick.*)

Gage, Henry Charles Lord. (*Viscount  
 Gage.*)

Gainsborough, Charles William Francis  
 Earl of.

Gardner, ——— Lord.

Gerard, Robert Tolver Lord.

Gifford, Edric Frederic Lord.

Gloucester and Bristol, Charles John  
 Bishop of.

Gordon, John Campbell Viscount. (*Earl  
 of Aberdeen.*)

Gormanston, Jenico William Joseph  
 Lord. (*Viscount Gormanston.*)

Gough, George Stephens Viscount.

Grafton, Augustus Charles Lennox Duke of.

Graham, Douglas Beresford Malise  
 Ronald Earl. (*Duke of Montrose.*)

Granard, George Arthur Hastings Lord.  
 (*Earl of Granard.*)

Grantley, John Richard Brinsley Lord.

Granville, Granville George Earl.

Greville, Algernon William Fulke Lord.

Grey, Henry Earl.

Grimthorpe, Edmund Lord.

Grinstead, William Willoughby Lord.  
 (*Earl of Enniskillen.*)

Guilford, Frederick George Earl of.

Gwydir, Peter Robert Lord.

Haddington, George Earl of. (*Elected  
 for Scotland.*)

Haldon, Lawrence Hesketh Lord.

Halifax, Charles Lindley Viscount.

Halsbury, Hardinge Stanley Lord. (*Lord  
 High Chancellor.*)

Hamilton of Dalzell, John Glencairn  
 Carter Lord.

Hammond, Edmund Lord.

Hampden, Henry Bouverie Wm. Viscount.

## HOUSE OF LORDS.

| NAME.                                                                                                        | NAME.                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Hampton, John Slaney Lord.                                                                                   | Hutchinson, John Luke George Viscount.<br>( <i>Earl of Donoughmore.</i> )         |
| Hardinge, Charles Stewart Viscount.                                                                          | Hylton, Hedworth Hylton Lord.                                                     |
| Hardwicke, Charles Philip Earl of.                                                                           |                                                                                   |
| Hare, William Lord. ( <i>Earl of Listowel.</i> )                                                             | Iddesleigh, Earl of.                                                              |
| Harewood, Henry Thynne Earl of.                                                                              | Ilchester, Henry Edward Earl of.                                                  |
| Harlech, William Richard Lord.                                                                               | Inchiquin, Edward Donough Lord.<br>( <i>Elected for Ireland.</i> )                |
| Harrington, Charles Augustus Earl of.                                                                        | Innes, James Henry Robert Earl. ( <i>Duke<br/>of Roxburghe.</i> )                 |
| Harris, George Robert Canning Lord.                                                                          |                                                                                   |
| Harrowby, Dudley Francis Stuart Earl of.                                                                     |                                                                                   |
| Hartismere, John Major Lord. ( <i>Lord<br/>Henniker.</i> )                                                   | Jersey, Victor Albert George Earl of.                                             |
| Hastings, George Manners Lord.                                                                               |                                                                                   |
| Hatherton, Edward Richard Lord.                                                                              | Keane, John Manley Arbuthnot Lord.                                                |
| Hawarden, Cornwallis Viscount. ( <i>Elected<br/>for Ireland.</i> )                                           | Kenlis, Thomas Lord. ( <i>Marquess of<br/>Headfort.</i> )                         |
| Hawke, Martin Bladen Lord.                                                                                   | Kenmare, Valentine Augustus Lord.<br>( <i>Earl of Kenmare.</i> )                  |
| Hay, George Lord. ( <i>Earl of Kinnoul.</i> )                                                                | Kenry, Windham Thomas Lord. ( <i>Earl<br/>of Dunraven and Mount-Earl.</i> )       |
| Headley, Charles Mark Lord. ( <i>Elected<br/>for Ireland.</i> )                                              | Kensington, William Lord.                                                         |
| Hereford, Robert Viscount.                                                                                   | Kenyon, Lloyd Lord.                                                               |
| Hereford, James Bishop of.                                                                                   | Ker, Schomberg Henry Lord. ( <i>Marquess<br/>of Lothian.</i> )                    |
| Herries, Marmaduke Francis Lord.                                                                             | Kesteven, John Henry Lord.                                                        |
| Herschell, Farrer Lord.                                                                                      | Kilmarnock, William Henry Lord. ( <i>Earl<br/>of Erroll.</i> )                    |
| Hertford, Hugh de Grey Marquess of.                                                                          | Kilmorey, Francis Charles Earl of.<br>( <i>Elected for Ireland.</i> )             |
| Heytesbury, William Henry Ashe Lord.                                                                         | Kimberley, John Earl of.                                                          |
| Hill, Rowland Clegg Viscount.                                                                                | Kinnaird, Arthur Fitz-Gerald Lord.                                                |
| Hillingdon, Charles Henry Lord.                                                                              | Kintore, Algernon Hawkins Thomond<br>Lord. ( <i>Earl of Kintore.</i> )            |
| Hillsborough, Arthur Wills J. Wellington<br>Blundell Trumbell Earl of. ( <i>Marquess<br/>of Downshire.</i> ) |                                                                                   |
| Hindlip, Henry Lord.                                                                                         | Lamington, Alexander Dundas Ross Lord.                                            |
| Hobhouse, Arthur Lord.                                                                                       | Lanesborough, John Vansittart Danvers<br>Earl of. ( <i>Elected for Ireland.</i> ) |
| Hood, Francis Wheler Viscount.                                                                               | Langford, Hercules Ed. Lord. ( <i>Elected<br/>for Ireland.</i> )                  |
| Hopetoun, John Adrian Louis Lord. ( <i>Earl<br/>of Hopetoun.</i> )                                           | Lansdowne, H. Charles Keith Marquess of.                                          |
| Hothfield, Henry James Lord.                                                                                 | Lathom, Edward Earl of. ( <i>Lord Chamber-<br/>lain of the Household.</i> )       |
| Houghton, Robert Offley Ashburton Lord.                                                                      | Lawrence, John Hamilton Lord.                                                     |
| Howard of Glossop, Francis E. Lord.                                                                          | Leconfield, Henry Lord.                                                           |
| Howard de Walden, Frederick G. Lord.                                                                         |                                                                                   |
| Howe, Richard William Penn, Earl.                                                                            |                                                                                   |
| Howth, William Ulick Tristram Lord.<br>( <i>Earl of Howth.</i> )                                             |                                                                                   |
| Huntingdon, Warner Francis John<br>Plantagenet Earl of.                                                      |                                                                                   |



## HOUSE OF LORDS.

| NAME.                                                                      | NAME.                                                                                   |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Leeds, George Godolphin Duke of.                                           | Mar, John Francis Erskine Earl of.<br>( <i>Elected for Scotland.</i> )                  |
| Leicester, Thomas William Earl of.                                         | Mar and Kellie, Walter Henry Earl of.<br>( <i>Elected for Scotland.</i> )               |
| Leigh, William Henry Lord.                                                 | Marlborough, George Charles Duke of.                                                    |
| Leinster, Charles Wm. Viscount. ( <i>Duke of Leinster.</i> )               | Massy, John Thomas William Lord.<br>( <i>Elected for Ireland.</i> )                     |
| Leven and Melville, Alexander Earl of.<br>( <i>Elected for Scotland.</i> ) | Meldrum, Charles Lord. ( <i>Marquess of Humily.</i> )                                   |
| Lichfield, Thomas George Earl of.                                          | Melville, Henry Viscount.                                                               |
| Lichfield, William Dalrymple Bishop of.                                    | Mendip, Henry George Lord. ( <i>Viscount Clifden.</i> )                                 |
| Lifford, James Viscount. ( <i>Elected for Ireland.</i> )                   | Meredyth, James Herbert Gustavus<br>Meredyth Lord. ( <i>Lord Athlumney.</i> )           |
| Lilford, Thomas Lyttleton Lord.                                            | Methuen, Frederick Henry Paul Lord.                                                     |
| Lindsay, John Trotter Earl of. ( <i>Elected for Scotland.</i> )            | Middleton, Digby Wentworth Bayard<br>Lord                                               |
| Lindsey, Montague Earl of.                                                 | Milltown, Ed. Nugent Earl of. ( <i>Elected for Ireland.</i> )                           |
| Lingen, Ralph Robert Wheeler Lord.                                         | Minster, Henry Francis Lord. ( <i>Marquess Conyngham.</i> )                             |
| Lismore, G. Ponsonby Lord. ( <i>Viscount Lismore.</i> )                    | Minto, William Hugh Earl of.                                                            |
| Liverpool, John Charles Bishop of.                                         | Monck, Charles Stanley Lord. ( <i>Viscount Monck.</i> )                                 |
| Llandaff, Richard Bishop of.                                               | Moncreiff, James Lord.                                                                  |
| Loftus, John Henry Wellington Graham<br>Lord. ( <i>Marquess of Ely.</i> )  | Monk Bretton, John George Lord.                                                         |
| Londesborough, William Henry Forester<br>Lord.                             | Monkswell, Robert Porrett Lord.                                                         |
| London, Frederick Bishop of.                                               | Montagu of Beaulieu, Henry John Lord.                                                   |
| Lonsdale, Hugh Cecil Earl of.                                              | Monteagle, George John Lord. ( <i>Marquess of Sligo.</i> )                              |
| Lovat, Simon Lord.                                                         | Monteagle of Brandon, Thomas Spring<br>Lord.                                            |
| Lovelace, William Earl of.                                                 | Moore, Henry Francis Seymour Lord.<br>( <i>Marquess of Drogheda.</i> )                  |
| Lovell and Holland, Charles George Lord.<br>( <i>Earl of Egmont.</i> )     | Morley, Albert Edmund Earl of.                                                          |
| Lucan, George Charles Earl of. ( <i>Elected for Ireland.</i> )             | Morton, Sholto George Watson Earl of.<br>( <i>Elected for Scotland.</i> )               |
| Lurgan, William Lord.                                                      | Mostyn, Llewelyn Nevill Vaughan Lord.                                                   |
| Lyttelton, Charles George Lord.                                            | Mount Edgecumbe, William Henry<br>Earl of.<br>( <i>Lord Steward of the Household.</i> ) |
| Lytton, Edward Robert Lytton Earl of.                                      | Mount-Temple, William Francis Lord.                                                     |
| Lyveden, Fitz Patrick Henry Lord.                                          | Mowbray, Alfred Joseph Lord.                                                            |
| Macclesfield, Thomas Augustus Wolsten-<br>holme Earl of.                   | Munster, William George Earl of.                                                        |
| Malmesbury, James Howard Earl of.                                          |                                                                                         |
| Manchester, William Drogo Duke of.                                         |                                                                                         |
| Manners, John Thomas Lord.                                                 |                                                                                         |
| Mansfield, William David Earl of.                                          |                                                                                         |
| Manvers Sydney William Herbert Earl.                                       |                                                                                         |

## HOUSE OF LORDS.

## NAME.

Napier, Robert Cornelis Lord.  
 Nelson, Horatio Earl.  
 Newcastle, Henry Pelham Archibald  
     Douglas Duke of.  
 Newcastle, Ernest Roland Bishop of.  
 Norfolk, Henry Duke of. (*Earl Marshal  
     of England.*)  
 Normanby, George Augustus Constantine  
     Marquess of.  
 North, William Henry John Lord.  
 Northampton, William Marquess of.  
 Northbourne, Walter Charles Lord.  
 Northbrook, Thomas George Earl of.  
 Northesk, George John Earl of. (*Elected  
     for Scotland.*)  
 Northington, Anthony Henley Lord.  
     (*Lord Henley.*)  
 Northumberland, Algernon Geo. Duke of.  
 Northwick, George Lord.  
 Norton, Charles Bowyer Lord.  
 Norwich, John Thomas Bishop of.

O'Hagan, Thomas Towneley Lord.  
 O'Neill, Edward Lord.  
 Onslow, William Hillier Earl of.  
 Oranmore and Browne, Geoffrey Dominick  
     Augustus Frederick Lord. (*Elected  
     for Ireland*)  
 Orford, Horatio Earl of.  
 Oriel, Clotworthy J. Eyre Lord. (*Viscount  
     Massereene.*)  
 Orkney, George William Hamilton Earl  
     of. (*Elected for Scotland.*)  
 Ormathwaite, Arthur Lord.  
 Ormonde, James Edward Wm. Theobald  
     Lord. (*Marquess of Ormonde.*)  
 Oxenbridge, William John Viscount.  
 Oxenfoord, John Lord. (*Earl of Stair.*)  
 Oxford, John Fielder Bishop of.

Pembroke and Montgomery, G. Robert  
     Charles Earl of.  
 Penrhyn, George Sholto Gordon Lord.  
 Penzance, James Plaisted Lord.

## NAME.

Peterborough, William Connor Bishop of.  
 Petre, William Joseph Lord.  
 Plunket, William Conyngham Lord.  
 Poltimore, Augustus Frederick George  
     Warwick Lord.  
 Polwarth, Walter Hugh Lord. (*Elected  
     for Scotland.*)  
 Ponsonby, Frederick George Brabazon  
     Lord. (*Earl of Bessborough.*)  
 Portarlington, Henry John Reuben Earl  
     of. (*Elected for Ireland.*)  
 Portland, William John Arthur Charles  
     James Duke of.  
 Portman, Edward Berkeley Viscount.  
 Portsmouth, Isaac Newton Earl of.  
 Poulett, William Henry Earl.  
 Powerscourt, Mervyn Edward Viscount.  
     (*Elected for Ireland.*)  
 Powerscourt, Mervyn Edward Lord. (*In  
     another place as Viscount Powers-  
     court.*)  
 Powis, Edward James Earl of.

Radnor, Jacob Earl of.  
 Raglan, George Fitz-Roy Henry Lord.  
 Ramsay, John William Lord. (*Earl of  
     Dalhousie.*)  
 Ranfurly, Uchter John Mark Lord. (*Earl  
     of Ranfurly.*)  
 Ravensworth, Henry George Earl of.  
 Rayleigh, John William Lord.  
 Reay, Donald James Lord.  
 Revelstoke, Edward Charles Lord.  
 Ribblesdale, Thomas Lord.  
 Richmond, Charles Henry Duke of.  
 Ripon, George Frederick S. Marquess of.  
 Robartes, Thomas Charles Lord.  
 Rochester, Anthony Wilson Bishop of.  
 Rodney, George Bridges Harley Dennett  
     Lord.  
 Romilly, William Lord.  
 Romney, Charles Earl of.  
 Rosebery, Archibald Philip Lord. (*Earl  
     of Rosebery.*)



## HOUSE OF LORDS.

| NAME.                                                              | NAME.                                                                             |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Ross, George Frederick Lord. ( <i>Earl of Glasgow.</i> )           | Sidmouth, William Wells Viscount.                                                 |
| Rosse, Lawrence Earl of. ( <i>Elected for Ireland.</i> )           | Silchester, William Lygon Lord. ( <i>Earl of Longford.</i> )                      |
| Rosslyn, Francis Robert Earl of.                                   | Sinclair, Charles Wm. Lord. ( <i>Elected for Scotland.</i> )                      |
| Rossmore, Derrick Warner William Lord.                             | Somerhill, Hubert G. Lord. ( <i>Marquess of Clanricarde.</i> )                    |
| Rothschild, Nathaniel Mayer Lord.                                  | Somers, Philip Reginald Lord.                                                     |
| Rowton, Montagu William Lord.                                      | Somerset, Archibald Henry Algernon Duke of.                                       |
| Russell, John Francis Stanley Earl.                                | Somerton, James Charles Herbert Welbore Ellis Lord. ( <i>Earl of Normanton.</i> ) |
| Rutland, Charles Cecil John Duke of.                               | Sondes, George Watson Earl.                                                       |
| Sackville, Mortimer Lord.                                          | Southampton, Charles Henry Lord.                                                  |
| Saint Albans, Wm. Amelius Aubrey de Vere Duke of.                  | Southwell, George Bishop of.                                                      |
| St. Albans, Thomas Legh Bishop of.                                 | Spencer, John Poyntz Earl.                                                        |
| St. Asaph, Joshua Bishop of.                                       | Stafford, Augustus Frederick Fitz-herbert Lord                                    |
| St. David's, William Basil Bishop of.                              | Stalbridge, Richard de Aquila Lord                                                |
| Saint Germans, Henry Cornwallis Earl of.                           | Stamford, Harry Earl of.                                                          |
| St. John of Bletso, St. Andrew Lord.                               | Stanhope, Arthur Philip Earl.                                                     |
| Saint Leonards, Edwd. Burtenshaw Lord.                             | Stanley of Alderley, Henry Edward John Lord.                                      |
| Saint Oswald, Rowland Lord.                                        | Stanley of Preston, Frederick Arthur Lord.                                        |
| St. Vincent, Carnegie Parker Viscount.                             | Stewart of Garlies, Alan Plantagenet Lord. ( <i>Earl of Galloway.</i> )           |
| Salisbury, R. Arthur Talbot Marquess of.                           | Stradbroke, George Edward J. Mowbray Earl of.                                     |
| Saltersford, James George Henry Lord. ( <i>Earl of Courtown.</i> ) | Strafford, George Stevens Earl of                                                 |
| Sandhurst, William Lord.                                           | Strafford, George Henry Charles Lord. ( <i>Viscount Enfield.</i> )                |
| Sandwich, Edward George Henry Earl of.                             | Strange, John James Hugh Henry Earl. ( <i>Duke of Athole.</i> )                   |
| Sandys, Augustus Frederick Arthur Lord.                            | Stratheden, William Frederick Lord.                                               |
| Saye and Sele, Frederick Benjamin Lord.                            | Strathmore and Kinghorn, Claude Earl of. ( <i>Elected for Scotland.</i> )         |
| Scarbrough, Aldred Frederick George Beresford Earl of.             | Strathspey, Jas. Lord. ( <i>Earl of Seafield.</i> )                               |
| Scarsdale, Alfred Nathaniel Holden Lord.                           | Stuart of Castle Stuart, George Lord. ( <i>Earl of Moray.</i> )                   |
| Seaton, James Lord.                                                | Sudeley, Charles Douglas Richard Lord.                                            |
| Sefton, William Philip Lord. ( <i>Earl of Sefton.</i> )            | Sudley, Arthur Saunders William Charles Fox Lord. ( <i>Earl of Arran.</i> )       |
| Selborne, Roundell Earl of.                                        | Suffield, Charles Lord.                                                           |
| Shaftesbury, Anthony Earl of.                                      |                                                                                   |
| Sheffield, Henry North Lord. ( <i>Earl of Sheffield.</i> )         |                                                                                   |
| Sherborne, Edward Lennox Lord.                                     |                                                                                   |
| Sherbrooke, Robert Viscount.                                       |                                                                                   |
| Shrewsbury, Charles Henry John Earl of.                            |                                                                                   |
| Shute, George William Lord. ( <i>Viscount Barrington.</i> )        |                                                                                   |

## HOUSE OF LORDS.

## NAME.

Suffolk and Berkshire, Henry Charles Earl of.  
 Sundridge, George Douglas Lord. (*Duke of Argyll.*)  
 Sutherland, George Granville William Duke of.  
 Sydney, John Robert Earl.  
 Talbot de Malahide, Richard Wogan Lord.  
 Tankerville, Charles Earl of.  
 Templemore, Henry Spencer Lord.  
 Templetown, George Frederick Viscount. (*Elected for Ireland.*)  
 Tennyson, Alfred Lord.  
 Tenterden, Charles Stuart Henry Lord.  
 Teynham, George Henry Lord.  
 Thring, Henry Lord.  
 Thurlow, Thomas John Lord.  
 Tollemache, John Lord.  
 Torrington, George Stanley Viscount.  
 Townshend, J. Villiers Stuart Marquess.  
 Tredegar, Godfrey Charles Lord.  
 Trevor, Arthur Edwin Lord.  
 Truro, George Howard Bishop of.  
 Truro, Charles Robert Claude Lord.  
 Tweeddale, William Montagu Lord. (*Marquess of Tweeddale.*)  
 Tweedmouth, Dudley Coutts Lord.  
 Tyrone, John Henry De La Poer Lord. (*Marquess of Waterford.*)  
 Vane, Charles Stewart Earl. (*Marquess of Londonderry.*)  
 Vaux of Harrowden, Hubert George Charles Lord.  
 Ventry, Dayrolles Blakeney Lord. (*Elected for Ireland.*)  
 Vernon, George William Henry Lord.  
 Verulam, James Walter Earl of.  
 Vivian, Hussey Crespigny Lord.  
 Walès, His Royal Highness the Prince of.  
 Waldegrave, William Frederick Earl.  
 Walsingham, Thomas Lord.

## NAME.

Wantage, Robert James Lord.  
 Watson, William Lord. (*A Lord of Appeal in Ordinary.*)  
 Wellington, Henry Duke of.  
 Wemyss, Francis Richard Lord. (*Earl of Wemyss.*)  
 Wenlock, Beilby Lord.  
 Wentworth, Ralph Gordon Lord.  
 Westbury, Richard Luttrell Pilkington Lord.  
 Westminster, Hugh Lupus Duke of.  
 Westmorland, Francis William Henry Earl of.  
 Wharnccliffe, Edward Montagu Stuart Granville Earl of.  
 Wigan, James Ludovic Lord. (*Earl of Crawford and Balcarres.*)  
 Willoughby de Broke, Henry Lord.  
 Wilton, Seymour John Grey Earl of.  
 Wimborne, Ivor Bertie Lord.  
 Winchester, John Marquess of.  
 Winchester, Edward Harold Bishop of.  
 Winchilsea and Nottingham, George James Earl of.  
 Windsor, Robert George Lord.  
 Winmarleigh, John Lord.  
 Winton, Archibald William Earl of. (*Earl of Eglintoun.*)  
 Wolseley, Garnet Joseph Viscount.  
 Wolverton, Lord.  
 Worcester, Henry Bishop of.  
 Worlingham, Archibald Brabazon Sparrow Lord. (*Earl of Gosford.*)  
 Wrottesley, Arthur Lord.  
 Wynford, William Draper Mortimer Lord.  
 Yarborough, Charles Alfred Worsley Earl of.  
 York, William Archbishop of.  
 Zetland, Lawrence Earl of.  
 Zouche of Haryngworth, Robt. Nathaniel Cecil George Lord.



## PEERS OF THE UNITED KINGDOM.

THE FOLLOWING LORDS ARE TWICE NAMED IN THE ROLL:—

Lord Halsbury, as Lord High Chancellor, and as Lord Halsbury.

Viscount Cranbrook, as Lord President, and as Viscount Cranbrook.

Earl Cadogan, as Lord Privy Seal, and as Earl Cadogan.

Earl of Mount Edgecumbe, as Lord Steward, and as Earl of Mount Edgecumbe.

Earl of Lathom, as Lord Chamberlain, and as Earl of Lathom.

Viscount Powerscourt, as Viscount Powerscourt, and as Lord Powerscourt.

## PEERS OF THE UNITED KINGDOM

USUALLY ADDRESSED BY THEIR HIGHER TITLES AS PEERS OF SCOTLAND OR IRELAND.

| <i>Scotch Peerage.</i>   | <i>Eng. Peerage.</i>  | <i>Irish Peerage.</i> | <i>Eng. Peerage.</i> |
|--------------------------|-----------------------|-----------------------|----------------------|
| E. Aberdeen.....         | V. Gordon             | V. Clifden.....       | B. Mendip            |
| D. Argyll .....          | B. Sundridge          | M. Conyngham ....     | B. Minster           |
| E. Arran .....           | B. Sudley             | E. Cork and Orrery..  | B. Boyle             |
| D. Athole .....          | E. Strange            | E. Courtown .....     | B. Saltersford       |
| D. Buccleuch .....       | E. Doncaster          | E. Darnley .....      | B. Clifton           |
| E. Caithness .....       | B. Barrogill          | M. Donegall .....     | B. Fisherwick        |
| E. Crawford & Balcarres. | B. Wigan.             | E. Donoughmore....    | V. Hutchinson        |
| E. Dalhousie .....       | B. Ramsay             | M. Downshire .....    | E. Hillsborough      |
| E. Eglintoun .....       | E. Winton             | M. Drogheda .....     | B. Moore             |
| E. Erroll .....          | B. Kilmarnock         | E. Dunraven .....     | B. Kenry             |
| E. Galloway .....        | B. Stewart of Garlies | E. Egmont ....        | B. Lovel & Holland   |
| E. Glasgow .....         | B. Ross               | M. Ely .....          | B. Loftus            |
| D. Hamilton.....         | D. Brandon            | E. Enniskillen .....  | B. Grinstead         |
| E. Home .....            | B. Douglas            | E. Erne.....          | B. Fermanagh         |
| M. Huntly.....           | B. Meldrum            | E. Fife .....         | B. Skene             |
| E. Kinnoull .....        | B. Hay                | E. Gosford .....      | B. Worlingham        |
| M. Lothian .....         | B. Kerr               | M. Headfort.....      | B. Kenlis            |
| E. Loudoun .....         | L. Hastings           | B. Henniker.....      | B. Hartismere        |
| D. Montrose.....         | E. Graham             | E. Howth.....         | B. Howth             |
| E. Moray .....           | B. Stuart             | D. Leinster .....     | V. Leinster          |
| B. Napier .....          | B. Ettrick            | E. Leitrim .....      | B. Clements          |
| B. Rollo .....           | B. Dunning            | E. Limerick .....     | B. Foxford           |
| D. Roxburghe .....       | E. Innes              | E. Listowel .....     | B. Hare              |
| E. Seafield .....        | B. Strathspey         | M. Londonderry ....   | E. Vane              |
| E. Southesk .....        | B. Balinhard          | E. Longford.....      | B. Silchester        |
| E. Stair .....           | B. Oxenfoord          | V. Massereene.....    | B. Oriel             |
| M. Tweeddale .....       | B. Tweeddale          | E. Meath .....        | B. Chaworth          |
| <i>Irish Peerage.</i>    |                       | V. Midleton .....     | B. Brodrick          |
| D. Abercorn .....        | M. Abercorn           | E. Normanton .....    | B. Somerton          |
| B. Athlumney .....       | B. Meredyth           | E. Roden .....        | B. Clanbrassill      |
| V. Barrington .....      | B. Shute              | E. Shannon .....      | B. Carleton          |
| E. Bessborough ....      | B. Ponsonby           | M. Sligo .....        | B. Monteagle         |
| V. Boyne .....           | B. Brancepeth         | M. Waterford .....    | B. Tyrone            |
| M. Clanricarde.....      | B. Somerhill          |                       |                      |

ALPHABETICAL LIST OF THE HOUSE OF COMMONS,  
AS ELECTED JUNE-JULY, 1886,  
*With CORRECTIONS to OCTOBER, 1887.*

ABBREVIATIONS.

L.—Liberal.

C.—Conservative.

D.L.—Dissentient Liberal.

N.—Nationalist.

| Member.                          | Constituency.               |
|----------------------------------|-----------------------------|
| L Abraham, W. ....               | Glamorganshire, Rhondda.    |
| N Abraham, W. ....               | Limerick County, West.      |
| L Acland, A. H. Dyke .....       | Yorks., W.R., S. Rotherham. |
| L Acland, C. T. Dyke .....       | Cornwall, N.E.              |
| C Addison, J. E. W. ....         | Ashton-under-Lyne.          |
| C Agg-Gardner, J. T. ....        | Cheltenham.                 |
| C Ainslie, W. G. ....            | Lanc., N.—N. Lonsdale.      |
| C Aird, J. ....                  | Paddington, N.              |
| C Akers-Douglas, A. ....         | Kent, E.                    |
| L Allison, R. A. ....            | Cumberland, North.          |
| C Allsopp, Hon. G. H. ....       | Worcester.                  |
| C Allsopp, Hon. Percy .....      | Taunton.                    |
| C Ambrose, W. ....               | Middlesex, Harrow.          |
| L Anderson, C. H. ....           | Elgin and Nairn.            |
| DL Anstruther, H. T. ....        | St. Andrews Burghs.         |
| C Anstruther, Col. R. H. L. .... | Suffolk, South-East.        |
| L Asher, A. ....                 | Elgin District.             |
| C Ashmead-Bartlett, E. ....      | Sheffield, Eccleshall.      |
| L Asquith, H. H. ....            | Fifeshire, East.            |
| C Atkinson, H. J. ....           | Boston.                     |
| L Austin, J. ....                | Yorks., W.R. (Osgoldcross). |
|                                  |                             |
| C Baden-Powell, G. ....          | Liverpool, Kirkdale.        |
| C Bailey, Sir J. R. ....         | Hereford.                   |
| C Baillie, Hon. W. C. ....       | St. Pancras, North.         |
| C Baird, J. G. A. ....           | Glasgow, Central.           |
| C Balfour, Right Hon. A. J. .... | Manchester, East.           |
| L Balfour, Sir George .....      | Kincardineshire.            |
| C Balfour, G. W. ....            | Leeds, Central.             |
| L Balfour, Right Hon. J. B. .... | Clackmannan.                |
| L Ballantine, W. H. W. ....      | Coventry.                   |
| C Banes, Major G. E. ....        | West Ham, South.            |
| L Barbour, W. B. ....            | Paisley.                    |



## HOUSE OF COMMONS.

| Member.                            | Constituency.                  |
|------------------------------------|--------------------------------|
| DL Barclay, J. W. ....             | Forfarshire.                   |
| c Baring, T. C. ....               | London City.                   |
| DL Baring, Viscount .....          | Bedfordshire, North.           |
| DL Barnes, A. ....                 | Derbyshire, Chesterfield.      |
| L Barran, J. ....                  | Yorkshire, W.R., E.—Otley.     |
| N Barry, J. ....                   | Wexford, South.                |
| c Bartley, G. C. T. ....           | Islington, North.              |
| c Barttelot, Sir W. ....           | Sussex, N.W.                   |
| DL Bass, H. A. ....                | Staffordshire, West.           |
| c Bates, Sir E. ....               | Plymouth.                      |
| c Baumann, A. A. ....              | Camberwell, Peckham.           |
| c Beach, W. W. B. ....             | Hampshire, West.               |
| c Beadel, W. J. ....               | Essex, Mid.                    |
| DL Beaumont, H. F. ....            | Yorkshire, W.R., Colne Valley. |
| L Beaumont, W. B. ....             | Northumberland, Tyneside.      |
| c Beckett, E. W. ....              | Yorkshire, N.R., Whitby.       |
| c Beckett-Denison, W. ....         | Nottinghamshire, Bassetlaw.    |
| c Bective, Earl of. ....           | Westmoreland, South.           |
| c Bentinck, Lord Henry C. ....     | Norfolk, N.W.                  |
| c Beresford, Lord C. ....          | Marylebone, East.              |
| c Bethell, Com. G. R. ....         | Yorkshire, E.R., Holderness.   |
| DL Bickford-Smith, W. ....         | Cornwall, Truro.               |
| DL Biddulph, M. ....               | Herefordshire, South.          |
| N Biggar, J. G. ....               | Cavan, West.                   |
| Bigwood, James. ....               | Middlesex, Brentford.          |
| c Birkbeck, Sir E. ....            | Norfolk, East.                 |
| N Blane, A. ....                   | Armagh, South.                 |
| c Blundell, Colonel H. B. H. ....  | Lancashire, S.W., Ince.        |
| DL Bolitho, Thomas Bedford .....   | Cornwall, Mid.                 |
| L Bolton, J. C. ....               | Stirlingshire.                 |
| L Bolton, T. D. ....               | Derbyshire, N. E.              |
| c Bond, G. H. ....                 | Dorsetshire, East.             |
| c Bonsor, H. C. O. ....            | Surrey, N. E.                  |
| c Boord, T. W. ....                | Greenwich.                     |
| c Borthwick, Sir A. ....           | Kensington, South.             |
| L Bradlaugh, C. ....               | Northampton.                   |
| c Bridgeman, Col. Hon. F. C. ....  | Bolton.                        |
| L Bright, Jacob. ....              | Manchester, S.W.               |
| DL Bright, Right Hon. John .....   | Birmingham, Central.           |
| L Bright, W. Leatham. ....         | Stoke-upon-Trent.              |
| c Bristowe, T. L. ....             | Lambeth, Norwood.              |
| L Broadhurst, H. ....              | Nottingham, West.              |
| c Brodrick, Hon. W. St. J. F. .... | Surrey, S.W.                   |
| c Bromley Davenport, W. ....       | Cheshire, Macclesfield.        |

## HOUSE OF COMMONS.

| Member.                                  | Constituency.              |
|------------------------------------------|----------------------------|
| C Brookfield, A. M. ....                 | Sussex, East.              |
| C Brooks, Sir W. C. ....                 | Cheshire, Altrincham.      |
| DL Brown, A. H. ....                     | Shropshire, Mid.           |
| L Brown, A. L. ....                      | Hawick Group.              |
| C Bruce, Lord Henry ....                 | Wiltshire, N.W.            |
| L Bruce, Hon. R. P. ....                 | Fifeshire, West.           |
| L Brunner, J. T. ....                    | Cheshire, Northwich.       |
| L Bryce, J. ....                         | Aberdeen, South.           |
| DL Buchanan, T. R. ....                  | Edinburgh, West.           |
| C Burdett-Coutts, W. ....                | Westminster.               |
| C Burghley, Lord ....                    | Northamptonshire, North.   |
| L Burt, T. ....                          | Morpeth.                   |
| L Buxton, Sydney ....                    | Tower Hamlets, Poplar.     |
| N Byrne, G. M. ....                      | Wicklow, West.             |
| DL Caine, W. S. ....                     | Barrow.                    |
| DL Caldwell, J. ....                     | Glasgow, St. Rollox.       |
| L Cameron, Dr. C. ....                   | Glasgow—College.           |
| L Cameron, J. Mc.Donald ....             | Wick District.             |
| C Campbell, Colonel Sir A. ....          | Renfrewshire, West.        |
| L Campbell, Sir G. ....                  | Kirkcaldy Burghs.          |
| N Campbell, H. ....                      | Fermanagh, South.          |
| C Campbell, J. A. ....                   | Glasgow and Aberdeen Univ. |
| DL Campbell, R. F. F. ....               | Ayr Burghs.                |
| L Campbell-Bannerman, Right Hon. H. .... | Stirling Group.            |
| N Carew, J. L. ....                      | Kildare, North.            |
| C Carmarthen, Marquis of ....            | Lambeth, Brixton.          |
| DL Cavendish, Lord E. ....               | Derbyshire, West.          |
| C Cavendish-Bentinck, Rt. Hon. G. ....   | Whitehaven.                |
| C Cavendish-Bentinck, W. G. ....         | Penrhyn and Falmouth.      |
| DL Chamberlain, Right Hon. J. ....       | Birmingham, West.          |
| DL Chamberlain, R. ....                  | Islington, West.           |
| N Chance, P. A. ....                     | Kilkenny County, South.    |
| L Channing, F. A. ....                   | Northamptonshire, East.    |
| C Chaplin, Right Hon. H. ....            | Lincolnshire, N. Kesteven. |
| C Charrington, Spencer ....              | Tower Hamlets, Mile-end.   |
| L Childers, Right Hon. H. C. E. ....     | Edinburgh, South.          |
| C Churchill, Rt. Hon. Ld. R. H. S. ....  | Paddington, South.         |
| N Clancy, J. J. ....                     | Dublin County, North.      |
| L Clark, G. B. ....                      | Caithness-shire.           |
| C Clarke, Sir E. ....                    | Plymouth.                  |
| L Cobb, H. P. ....                       | Warwickshire, S.E.         |
| C Coddington, W. ....                    | Blackburn.                 |
| DL Coghill, D. H. ....                   | Newcastle-under-Lyme.      |



## HOUSE OF COMMONS.

| Member.                           | Constituency.                |
|-----------------------------------|------------------------------|
| L Cohen, A. ....                  | Southwark, West.             |
| L Coleridge, Hon. Bernard ....    | Sheffield, Attercliffe.      |
| DL Collings, Jesse ....           | Birmingham, Bordesley.       |
| L Colman, J. J. ....              | Norwich.                     |
| c Colomb, Captain J. R. C. ....   | Tower Hamlets, Bow.          |
| c Commerell, Adm. Sir J. E. ....  | Southampton.                 |
| N Commins, A. ....                | Roscommon, South.            |
| c Compton, F. ....                | Hampshire, New Forest.       |
| N Condon, T. J. ....              | Tipperary, East.             |
| N Connolly, Laurence ....         | Longford, South.             |
| N Conway, M. ....                 | Leitrim County, North.       |
| L Conybeare, C. A. V. ....        | Cornwall, N.W.               |
| c Cooke, C. W. R. ....            | Newington, West.             |
| N Corbet, W. J. ....              | Wicklow, East.               |
| DL Corbett, A. L. C. ....         | Glasgow, Tradeston.          |
| DL Corbett, J. ....               | Worcestershire, Mid.         |
| c Corry, Sir J. P. ....           | Armagh, Mid.                 |
| L Cosham, Handel ....             | Bristol, East.               |
| c Cotton, Captain E. T. D'A. .... | Cheshire, Wirral.            |
| DL Courtney, L. H. ....           | Cornwall, S.E.               |
| N Cox, J. R. ....                 | Clare, East.                 |
| L Cozens-Hardy, H. H. ....        | Norfolk, North.              |
| L Craig, J. ....                  | Newcastle-on-Tyne.           |
| DL Craig-Sellar, A. ....          | Lanarkshire, Partick.        |
| c Cranborne, Viscount. ....       | Lancashire, N.E., Darwen.    |
| L Craven, J. ....                 | Yorkshire, W.R., Shipley.    |
| L Crawford, D. ....               | Lanarkshire, N.E.            |
| L Crawford, W. ....               | Durham, Mid.                 |
| L Cremer, W. R. ....              | Shoreditch, Haggerston.      |
| N Crilly, D. ....                 | Mayo, North.                 |
| L Crossley, E. ....               | Yorkshire, W.R., N. Sowerby. |
| DL Crossley, Sir S. B. ....       | Suffolk, North.              |
| DL Crossman, Colonel Sir W. ....  | Portsmouth.                  |
| c Cubitt, Right Hon. G. ....      | Surrey, Mid.                 |
| DL Currie, Sir D. ....            | Perthshire, West.            |
| c Curzon, Viscount ....           | Bucks, South.                |
| c Curzon, Hon. G. N. ....         | Lancashire, S.W., Southport. |
| c Dalrymple, C. ....              | Ipswich.                     |
| c Davenport, H. T. ....           | Staffordshire, Leek.         |
| L Davies, W. ....                 | Pembrokeshire.               |
| c Dawnay, Colonel Hon. L. P. .... | Yorkshire, N.R., Thirsk.     |
| N Deasy, J. ....                  | Mayo, West.                  |
| c De Cobain, E. S. W. ....        | Belfast, East.               |

## HOUSE OF COMMONS.

| Member.                            | Constituency.                |
|------------------------------------|------------------------------|
| c De Lisle, E. J. M. P.....        | Leicestershire, Mid.         |
| c Dickson, Major A. G. ....        | Dover.                       |
| N Dillon, J.....                   | Mayo, East.                  |
| L Dillwyn, L. L.....               | Swansea, Town.               |
| c Dimsdale, Baron R. ....          | Hertfordshire, Hitchin.      |
| DL Dixon, G. ....                  | Birmingham, Edgbaston.       |
| c Dixon-Hartland, F. D.....        | Middlesex, Uxbridge.         |
| L Dodds, J. ....                   | Stockton-on-Tees.            |
| c Donkin, R. S.....                | Tynemouth.                   |
| c Dorington, Sir J. E.....         | Gloucestershire, North.      |
| L Duff, R. W.....                  | Banffshire.                  |
| c Dugdale, J. S.....               | Warwickshire, N.E.           |
| c Duncan, Colonel F. ....          | Finsbury, Holborn.           |
| c Duncombe, A.....                 | Yorkshire, E. R., Howdensh.  |
| DL Ebrington, Viscount .....       | Devonshire, W.               |
| c Edwards-Heathcote, Col. J.....   | Staffordshire, N.W.          |
| c Edwardes-Moss, T. C. ....        | Lancashire, S.W., Widnes.    |
| c Egerton, Hon. A. de T. ....      | Cheshire, Knutsford.         |
| c Egerton, Hon. A. J. F.....       | Lancashire, S.E., Eccles.    |
| c Elcho, Lord .....                | Ipswich.                     |
| DL Elliot, Hon. A. R. D. ....      | Roxburghshire.               |
| c Elliot, Sir G. ....              | Monmouthshire District.      |
| c Elliot, G. W.....                | Yorkshire, N.R., Richmond.   |
| DL Elliot, Hon. H. F. H.....       | Ayrshire, North.             |
| L Ellis, James .....               | Leicestershire, West.        |
| L Ellis, J. E.....                 | Nottinghamshire, Rushcliffe. |
| c Ellis, Sir J. W.....             | Surrey, Kingston.            |
| L Ellis, T. E. ....                | Merionethshire.              |
| c Elton, C. I.....                 | Somerset, West.              |
| N Esmonde, Sir T. H. G.....        | Dublin County, South.        |
| L Esslemont, P.....                | Aberdeenshire, East.         |
| c Evelyn, W. J.....                | Deptford.                    |
| L Evershed, Richard .....          | Staffordshire, Burton.       |
| c Ewart, W. ....                   | Belfast, North.              |
| c Ewing, Sir A. Orr.....           | Dumbartonshire.              |
| c Eyre, Colonel H. ....            | Lincolnshire, W. Lindsey.    |
| c Farquharson, H. R. ....          | Dorsetshire, W. (Bridport).  |
| L Farquharson, Dr. R.....          | Aberdeenshire, West.         |
| c Feilden, General R. J.....       | Lancashire, N. (Chorley).    |
| c Fellowes, Ailwyn .....           | Huntingdonshire, North.      |
| L Fenwick, C. ....                 | Northumberland, Wansbeck.    |
| L Ferguson, Munro .....            | Leith Burghs.                |
| c Fergusson, Right Hon. Sir J..... | Manchester, N.E.             |



## HOUSE OF COMMONS.

| Member.                           | Constituency.                 |
|-----------------------------------|-------------------------------|
| C Field, Admiral .....            | Sussex, South.                |
| C Fielden, T.....                 | Lancashire, S.E. (Middleton). |
| C Finch, G. H. ....               | Rutlandshire.                 |
| DL Finlay, R. B.....              | Inverness, Burghs.            |
| N Finucane, J. ....               | Limerick County, East.        |
| C Fisher, W. H.....               | Fulham.                       |
| C Fitzgerald, R. U. P.....        | Cambridge.                    |
| DL Fitzwilliam, Hon. W. J. W..... | Peterborough.                 |
| Ċ Fitzwygram, Sir F. ....         | Hampshire, South.             |
| C Fletcher, Sir H.....            | Sussex, Mid.                  |
| L Flower, Cyril .....             | Bedfordshire, South (Luton).  |
| N Flynn, J. C. ....               | Cork County, North.           |
| N Foley, P. J.....                | Galway, West.                 |
| L Foljambe, C. G. S.....          | Nottinghamshire, Mansfield.   |
| C Folkestone, Lord .....          | Middlesex, Enfield.           |
| L Forster, Sir C. ....            | Walsall.                      |
| C Forwood, A. B. ....             | Lancashire, S.W., Ormskirk.   |
| L Foster, Dr. W. B.....           | Derbyshire, Ilkeston.         |
| L Fowler, Right Hon. H. H. ....   | Wolverhampton, East.          |
| C Fowler, Sir R. ....             | City of London.               |
| N Fox, Dr. J. F. ....             | King's County, Tullamore.     |
| C Fraser, General C. C. ....      | Lambeth, North.               |
| DL Fraser-Mackintosh, C.....      | Inverness-shire.              |
| DL Fry, Lewis .....               | Bristol, North.               |
| L Fry, Theodore .....             | Darlington.                   |
| L Fuller, G. P. ....              | Wiltshire, West.              |
| C Fulton, J. Forrest .....        | West Ham, North.              |
|                                   |                               |
| L Gane, J. L.....                 | Leeds, East.                  |
| L Gardner, H. ....                | Essex, North.                 |
| L Gaskell, C. G. Milnes- .....    | Yorkshire, W.R., Morley.      |
| C Gedge, S.....                   | Stockport.                    |
| C Gent-Davis, R. ....             | Lambeth, Kennington.          |
| C Gibson, J. G.....               | Liverpool, Walton.            |
| C Giles, A.....                   | Southampton.                  |
| N Gill, H. J. ....                | Limerick City.                |
| N Gill, T. P. ....                | Louth, South.                 |
| N Gillhooly, J. ....              | Cork County, West.            |
| C Gilliat, J. S. ....             | Clapham.                      |
| L Gladstone, H. J.....            | Leeds, West.                  |
| L Gladstone, Right Hon. W. E..... | Midlothian.                   |
| C Godson, A. F.....               | Kidderminster.                |
| DL Goldsmid, Sir Julian .....     | St. Pancras, South.           |
| C Goldsworthy, General W. T.....  | Hammersmith.                  |

## HOUSE OF COMMONS.

| Member.                            | Constituency.                         |
|------------------------------------|---------------------------------------|
| c Gorst, Sir J. E.....             | Chatham.                              |
| DL Goschen, G. J.....              | St. George's, Hanover Square.         |
| L Gourley, E. T. ....              | Sunderland.                           |
| L Graham, R. C. ....               | Lanarkshire, North-West.              |
| c Gray, C. W. ....                 | Essex, East (Maldon).                 |
| N Gray, E. Dwyer.....              | Dublin City, St. Stephen's.           |
| c Green, Sir E.....                | Wakefield.                            |
| c Greenall, Sir G.....             | Warrington.                           |
| c Greene, E. ....                  | Suffolk, N.W.                         |
| L Grey, Sir E. ....                | Northumberland, Berwick.              |
| c Grimston, Viscount .....         | Hertfordshire, Mid.                   |
| c Grotrian, F. B. ....             | Hull, East.                           |
| DL Grove, Sir T. F. ....           | Wiltshire, South.                     |
| L Gully, W. C. ....                | Carlisle.                             |
| c Gunter, Colonel R. ....          | Yorkshire, W.R., E., Barkston<br>Ash. |
| DL Gurdon, R. T. ....              | Norfolk, Mid.                         |
| L Haldane, R. B. ....              | Haddingtonshire.                      |
| c Hall, A. W.....                  | Oxford.                               |
| c Hall, Charles .....              | Cambridgeshire, West.                 |
| c Halsey, T. F.....                | Hertfordshire, West.                  |
| c Hambro, Colonel C. J. T.....     | Dorsetshire, South.                   |
| c Hamilton, Colonel C. E. ....     | Southwark—Rotherhithe.                |
| c Hamilton, Lord Claud J.....      | Liverpool, West Derby.                |
| c Hamilton, Lord E.....            | Tyrone, North.                        |
| c Hamilton, Rt. Hon. Lord G.....   | Middlesex, Ealing.                    |
| c Hamley, General Sir E. ....      | Birkenhead.                           |
| c Hanbury, R. W.....               | Preston.                              |
| L Hanbury-Tracy, Hon. F.....       | Montgomery District.                  |
| c Hankey, F. A. ....               | Surrey, N.W.                          |
| L Harcourt, Right Hon. Sir W.....  | Derby.                                |
| c Hardcastle, E. ....              | Salford, North.                       |
| c Hardcastle, F. ....              | Lanc., S.E., West Houghton.           |
| c Hardy, Hon. A. Gathorne .....    | Sussex, North.                        |
| c Hardy, Hon. J. S. Gathorne.....  | Kent, Mid.                            |
| N Harrington, E. ....              | Kerry, West.                          |
| N Harrington, T. ....              | Dublin City, Harbour.                 |
| N Harris, M. ....                  | Galway, East.                         |
| c Hart-Dyke, Right Hon. Sir W..... | Kent, N.W.                            |
| DL Hartington, Marquis of .....    | Lancashire, N.E., Rossendale.         |
| DL Hastings, G. W. ....            | Worcestershire, East.                 |
| DL Havelock-Allan, Sir H.....      | Durham, S.E.                          |
| N Hayden, L. P. ....               | Leitrim, South.                       |



## HOUSE OF COMMONS.

| Member.                                | Constituency.                 |
|----------------------------------------|-------------------------------|
| N Healy, M. ....                       | Cork, City.                   |
| N Healy, T. M. ....                    | Longford.                     |
| C Heath, A. R. ....                    | Lincolnshire, E., Lindsey.    |
| C Heaton, J. Henniker. ....            | Canterbury.                   |
| DL Heneage, Right Hon. E. ....         | Grimsby.                      |
| C Herbert, Hon. Sidney ....            | Croydon.                      |
| C Hermon-Hodge, R. T. ....             | Lancashire, N.E., Accrington. |
| C Hervey, Lord F. ....                 | Bury St. Edmunds.             |
| C Hicks-Beach, Right Hon. Sir M. ....  | Bristol, West.                |
| C Hill, Lord Arthur W. ....            | Down County, West.            |
| C Hill, A. Staveley ....               | Staffordshire, Kingswinford.  |
| C Hill, Colonel E. S. ....             | Bristol, South.               |
| DL Hingley, B. ....                    | Worcestershire, North.        |
| C Hoare, S. ....                       | Norwich.                      |
| DL Hobhouse, H. ....                   | Somerset, East.               |
| L Holden, I. ....                      | Yorkshire, W.R., N. Keighley. |
| C Holland, Sir H. ....                 | Hampstead.                    |
| C Holloway, G. ....                    | Gloucestershire, Mid.         |
| N Hooper, J. ....                      | Cork County, S.E.             |
| C Hornby, W. H. ....                   | Blackburn.                    |
| C Houldsworth, Sir W. H. ....          | Manchester, N. W.             |
| C Howard, J. ....                      | Middlesex, Tottenham.         |
| L Howell, G. ....                      | Bethnal Green, N. E.          |
| C Howorth, H. H. ....                  | Salford, South.               |
| L Hoyle, I. ....                       | Lancashire, S. E., Heywood.   |
| C Hozier, J. H. C. ....                | Lanarkshire, South.           |
| C Hubbard, E. ....                     | Bucks, North.                 |
| C Hughes, E. ....                      | Woolwich.                     |
| C Hughes-Hallett, Colonel F. C. ....   | Rochester.                    |
| C Hulse, E. H. ....                    | Salisbury.                    |
| C Hunt, F. Seager ....                 | Marylebone, West.             |
| L Hunter, W. A. ....                   | Aberdeen, North.              |
| C Hunter, Sir W. G. ....               | Hackney, Central.             |
| C Ibbetson, Rt. Hon. Sir H. J. S. .... | Essex, W. (Epping).           |
| L Illingworth, A. ....                 | Bradford, West.               |
| C Isaacs, L. H. ....                   | Newington, Walworth.          |
| C Isaacson, F. W. ....                 | Tower Hamlets, Stepney.       |
| C Jackson, W. L. ....                  | Leeds, North.                 |
| L Jacoby, J. A. ....                   | Derbyshire, Mid.              |
| L James, C. H. ....                    | Merthyr Tydvil.               |
| DL James, Right Hon. Sir H. ....       | Bury.                         |
| L James, Hon. W. H. ....               | Gateshead.                    |

## HOUSE OF COMMONS.

| Member.                            | Constituency.                 |
|------------------------------------|-------------------------------|
| DL Jardine, Sir R.....             | Dumfriesshire.                |
| c Jarvis, Weston .....             | King's Lynn.                  |
| c Jeffreys, A. F. ....             | Hampshire, North.             |
| c Jennings, L. J. ....             | Stockport.                    |
| c Johnston, W.....                 | Belfast, South.               |
| L Joicey, J. ....                  | Durham, Chester-le-Street.    |
| L Jones, Ll. A. Atherley.....      | Durham, N. W.                 |
| N Jordan, J. ....                  | Clare, West.                  |
| L Kay-Shuttleworth, Sir U. J. .... | Lancashire, N. E., Clitheroe. |
| c Kelly, J. R. ....                | Camberwell, North.            |
| c Kennaway, Sir J. H.....          | Devonshire, East.             |
| Kennedy, E. J.....                 | Sligo, South.                 |
| L Kenny, C. S.....                 | Yorkshire, W. R., Barnsley.   |
| N Kenny, J. E.....                 | Cork County, South.           |
| N Kenny, M. J.....                 | Tyrone, Mid.                  |
| DL Kenrick, W.....                 | Birmingham, North.            |
| c Kenyon, Hon. G. T.....           | Denbigh, Boroughs.            |
| c Ker, Captain R. W. B.....        | Down, East.                   |
| c Kerans, F. H. ....               | Lincoln.                      |
| L Kilcoursie, Viscount.....        | Somerset, South.              |
| c Kimber, H. ....                  | Wandsworth.                   |
| c King, H. S. ....                 | Hull, Central.                |
| c King-Harman, Colonel E. R. ....  | Kent, Isle of Thanet.         |
| c Knatchbull-Hugessen, H. ....     | Kent, N. E.                   |
| c Knightley, Sir R. ....           | Northamptonshire, S.          |
| c Knowles, Lees .....              | Salford, West.                |
| c Kynoch, G. ....                  | Aston Manor.                  |
| L Labouchere, H.....               | Northampton.                  |
| L Lacaita, C. C. ....              | Dundee.                       |
| c Lafone, A. ....                  | Southwark, Bermondsey.        |
| N Lalor, R. ....                   | Queen's County, Leix.         |
| c Lambert, C. ....                 | Islington, East.              |
| N Lane, W. J. ....                 | Cork County, East.            |
| c Laurie, Colonel R. P. ....       | Bath.                         |
| c Lawrance, J. C. ....             | Lincolnshire, S., Kesteven.   |
| c Lawrence, Sir T. ....            | Surrey, S.E.                  |
| c Lawrence, W. F. ....             | Liverpool, Abercromby.        |
| L Lawson, H. L. W. ....            | St. Pancras, West.            |
| L Lawson, Sir W.....               | Cumberland, Cockermouth.      |
| DL Lea, T. ....                    | Londonderry, South.           |
| N Leahy, J. ....                   | Kildare, South.               |
| L Leake, R. ....                   | Lancashire, S.E., Radcliffe.  |



## HOUSE OF COMMONS.

| Member.                             | Constituency.                |
|-------------------------------------|------------------------------|
| N Leamy, E. ....                    | Cork County, N.E.            |
| C Lechmere, Sir E. A. H. ....       | Worcestershire, West.        |
| C Lees, E. ....                     | Oldham.                      |
| C Legh, T. W. ....                  | Lancashire, S.W., Newton.    |
| C Leighton, S. ....                 | Shropshire, West.            |
| C Lethbridge, Sir R. ....           | Kensington, North.           |
| C Lewis, C. E. ....                 | Antrim, North.               |
| DL Lewis, G. Pitt ....              | Devon, N.W.                  |
| L Lewis, T. ....                    | Anglesey.                    |
| C Lewisham, Rt. Hon. Viscount. .... | Lewisham.                    |
| C Llewellyn, E. H. ....             | Somerset, North.             |
| L Lockwood, F. ....                 | York.                        |
| C Long, W. H. ....                  | Wiltshire, East.             |
| C Low, M. ....                      | Grantham.                    |
| C Lowther, J. W. ....               | Cumberland, Mid.             |
| C Lowther, Hon. W. ....             | Westmoreland, North.         |
| DL Lubbock, Sir J. ....             | London University.           |
| L Lyell, L. ....                    | Orkney and Shetland.         |
| DL Lymington, Viscount ....         | Devonshire, North.           |
| L McArthur, A. ....                 | Leicester.                   |
| L McArthur, W. A. ....              | Cornwall, Mid.               |
| C Macartney, W. G. E. ....          | Antrim, South.               |
| C M'Calmont, Captain J. M. ....     | Antrim, East.                |
| N McCartan, M. ....                 | Down County, South.          |
| N McCarthy, Justin ....             | Londonderry, City.           |
| N McCarthy, J. Huntly ....          | Newry.                       |
| C Macdonald, Right Hon. J. H. ....  | Edin. and St. And. Univs.    |
| N Macdonald, P. ....                | Sligo County, North.         |
| L Macdonald, Dr. R. ....            | Ross and Cromarty.           |
| N Macdonald, W. A. ....             | Queen's County, Ossory.      |
| L McEwan, W. ....                   | Edinburgh, Central.          |
| L McInnes, M. ....                  | Northumberland, Hexham.      |
| N McKenna, Sir J. N. ....           | Monaghan, South.             |
| L M'Lagan, P. ....                  | Linlithgowshire.             |
| DL Maclean, F. W. ....              | Oxfordshire, Mid.            |
| C Maclean, J. M. ....               | Oldham.                      |
| L M'Laren, W. S. B. ....            | Cheshire, Crewe.             |
| C Maclure, J. W. ....               | Lancashire, S.E., Stretford. |
| N MacNeil, J. G. Swift ....         | Donegal, South.              |
| C Madden, D. H. ....                | Dublin University.           |
| N Mahon, James Patrick ....         | Carlow County.               |
| N Mahoney, P. ....                  | Meath, North.                |
| L Maitland, W. F. ....              | Brecknockshire.              |

## HOUSE OF COMMONS.

| Member.                             | Constituency.                |
|-------------------------------------|------------------------------|
| C Makins, Colonel W. T.....         | Essex, S.W.                  |
| C Malcolm, J. W.....                | Argyllshire.                 |
| C Mallock, R.....                   | Devonshire, Torquay.         |
| C Manners, Right Hon. Lord J.....   | Leicestershire, East.        |
| C Maple, Blundell.....              | Camberwell, Dulwich.         |
| L Mappin, F. T.....                 | Yorks., W.R., S. Hallmsh.    |
| C March, Earl of .....              | Sussex, S.W.                 |
| L Marjoribanks, Right Hon. E.....   | Berwickshire.                |
| C Marriott, Right Hon. W. T.....    | Brighton.                    |
| N Marum, E. P. M. ....              | Kilkenny County, North.      |
| L Mason, S. ....                    | Lanarkshire, Mid.            |
| C Matthews, Right Hon. Henry .....  | Birmingham, East.            |
| C Maxwell, Sir H.....               | Wigtownshire.                |
| C Mayne, Admiral R. C. ....         | Pembroke, Boroughs.          |
| N Mayne, T. ....                    | Tipperary, Mid.              |
| L Menzies, R. S.....                | Perthshire, East.            |
| DL Mildmay, F. B.....               | Devon, S. (Totnes).          |
| C Mills, Hon. C. W.....             | Kent, West.                  |
| C Milvain, T.....                   | Durham.                      |
| N Molloy, B. C.....                 | King's County, Birr.         |
| L Montagu, S. ....                  | Tower Hamlets, Whitechapel.  |
| DL More, R. J. ....                 | Shropshire, South.           |
| C Morgan, Colonel Hon. F. C.....    | Monmouthshire, South.        |
| L Morgan, Right Hon. G. O. ....     | Denbighshire, East.          |
| L Morgan, O. V. ....                | Battersea.                   |
| L Morley, Arnold .....              | Nottingham, East.            |
| L Morley, Right Hon. John.....      | Newcastle-on-Tyne.           |
| DL Morrison, W. ....                | Yorkshire, W.R., N. Skipton. |
| C Mount, W. G.....                  | Berks, South.                |
| C Mowbray, Right Hon. Sir J. R..... | Oxford University.           |
| C Mowbray, R. G. C.....             | Lancashire, S.E.—Prestwich.  |
| C Mulholland, H. L.....             | Londonderry, North.          |
| C Muncaster, Lord .....             | Cumberland, West.            |
| L Mundella, Right Hon. A. J.....    | Sheffield, Brightside.       |
| C Muntz, P. A. ....                 | Warwickshire, North.         |
| C Murdock, C. T.....                | Reading.                     |
| N Murphy, W. M.....                 | Dublin City, St. Patrick's.  |
| L Neville, Ralph .....              | Liverpool Exchange.          |
| C Newark, Viscount .....            | Nottinghamshire, Newark.     |
| L Newnes, G.....                    | Cambridgeshire, East.        |
| C Noble, Wilson .....               | Hastings.                    |
| N Nolan, J.....                     | Louth, North.                |
| N Nolan, Colonel J. P.....          | Galway, North.               |



## HOUSE OF COMMONS.

| Member.                            | Constituency.               |
|------------------------------------|-----------------------------|
| c Norris, E. S. ....               | Tower Hamlets, Limehouse.   |
| c Northcote, Hon. H. S. ....       | Exeter.                     |
| c Norton, R. ....                  | Kent, S.W.                  |
| N O'Brien, J. F. X. ....           | Mayo, South.                |
| N O'Brien, P. ....                 | Monaghan, North.            |
| N O'Brien, P. J. ....              | Tipperary, North.           |
| N O'Brien, William ....            | Cork, N.E.                  |
| N O'Connor, Arthur ....            | Donegal, East.              |
| N O'Connor, John ....              | Kerry, South.               |
| N O'Connor, J. ....                | Tipperary, South.           |
| N O'Connor, T. P. ....             | Liverpool, Scotland.        |
| N O'Doherty, J. E. ....            | Donegal, North.             |
| N O'Hanlon, T. ....                | Cavan, East.                |
| N O'Hea, P. ....                   | Donegal, West.              |
| N O'Kelly, J. ....                 | Roscommon, North.           |
| c O'Neill, Hon. R. T. ....         | Antrim, Mid.                |
| c Paget, Colonel Sir R. H. ....    | Somersetshire, Wells.       |
| L Palmer, C. M. ....               | Durham, Jarrow.             |
| L Parker, C. S. ....               | Perth.                      |
| c Parker, Hon. F. ....             | Oxfordshire, South.         |
| N Parnell, C. S. ....              | Cork City.                  |
| L Paulton, J. M. ....              | Durham, Bishop Auckland.    |
| L Peacock, R. ....                 | Lancashire, S.E., Gorton.   |
| c Pearce, W. ....                  | Lanarkshire, Govan.         |
| L Pease, A. E. ....                | York.                       |
| L Pease, H. F. ....                | Yorkshire, N.R., Cleveland. |
| L Pease, Sir J. W. ....            | Durham, Barnard Castle.     |
| L Peel, Right Hon. A. W. ....      | Warwick and Leamington.     |
| c Pelly, Sir Lewis. ....           | Hackney, North.             |
| c Penton, Captain F. T. ....       | Finsbury, Central.          |
| L Pickard, B. ....                 | Yorks., N.R., S. Normanton. |
| L Pickersgill, E. H. ....          | Bethnal Green, S.W.         |
| L Picton, J. A. ....               | Leicester.                  |
| N Pinkerton, J. ....               | Galway, City.               |
| L Playfair, Right Hon. Sir L. .... | Leeds, South.               |
| L Plowden, Sir W. C. ....          | Wolverhampton, West.        |
| c Plunkett, Right Hon. D. R. ....  | Dublin University.          |
| c Plunkett, Hon. J. W. ....        | Gloucestershire, South.     |
| c Pomfret, W. P. ....              | Kent, South.                |
| L Portman, Hon. E. B. ....         | Dorsetshire, North.         |
| L Potter, T. B. ....               | Rochdale.                   |
| c Powell, F. S. ....               | Wigan.                      |

## HOUSE OF COMMONS.

| Member.                          | Constituency.                |
|----------------------------------|------------------------------|
| L Powell, W. R. H. ....          | Carmarthenshire, West.       |
| N Power, P. J. ....              | Waterford County, East.      |
| N Power, R. ....                 | Waterford City.              |
| C Price, Captain G. E. ....      | Devonport.                   |
| L Price, Captain T. B. ....      | Monmouthshire, North.        |
| L Priestley, B. ....             | Yorkshire, W.R., E. Pudsey.  |
| L Provand, A. D. ....            | Glasgow, Blackfriars.        |
| L Pugh, D. ....                  | Carmarthenshire, East.       |
| C Puleston, J. H. ....           | Devonport.                   |
| N Pyne, J. D. ....               | Waterford County, West.      |
| DL Quilter, W. C. ....           | Suffolk, South.              |
| N Quinn, T. ....                 | Kilkenny City.               |
| C Raikes, Right Hon. H. C. ....  | Cambridge University.        |
| C Rankin, J. ....                | Herefordshire, North.        |
| C Rasch, Major F. C. ....        | Essex, S.E.                  |
| L Rathbone, W. ....              | Carnarvonshire, North.       |
| N Redmond, J. E. ....            | Wexford, North.              |
| N Redmond, W. H. K. ....         | Fermanagh, North.            |
| L Reed, Sir E. J. ....           | Cardiff.                     |
| C Reed, H. Byron. ....           | Bradford, East.              |
| L Reid, R. T. ....               | Dumfries Burghs.             |
| L Rendel, S. ....                | Montgomeryshire.             |
| N Reynolds, W. J. ....           | Tyrone, East.                |
| L Richard, H. ....               | Merthyr Tydvil.              |
| DL Richardson, T. ....           | Hartlepool.                  |
| C Richardson-Gardner, R. ....    | Windsor.                     |
| C Ridley, Sir M. W. ....         | Lancashire, N.W., Blackpool. |
| C Ritchie, Right Hon. C. T. .... | Tower Hamlets, St. George's. |
| L Roberts, John ....             | Carnarvonshire, South.       |
| L Roberts, John ....             | Flint Boroughs.              |
| L Robertson, E. ....             | Dundee.                      |
| C Robertson, J. P. B. ....       | Buteshire.                   |
| C Robinson, Brooke ....          | Dudley.                      |
| L Robinson, T. ....              | Gloucester.                  |
| L Roe, T. ....                   | Derby.                       |
| C Rollit, Sir A. K. ....         | Islington, South.            |
| L Roscoe, Sir H. ....            | Manchester, South.           |
| C Ross, Major A. H. ....         | Maidstone.                   |
| DL Rothschild, Baron F. de ....  | Buckinghamshire, Mid.        |
| C Round, J. ....                 | Essex, N.E.                  |
| L Rowlands, Bowen ....           | Cardiganshire.               |
| L Rowlands, J. ....              | Finsbury, East.              |



## HOUSE OF COMMONS.

| Member.                              | Constituency.                  |
|--------------------------------------|--------------------------------|
| L Rowntree, J. ....                  | Scarborough.                   |
| C Royden, T. B. ....                 | Liverpool, W., Toxteth.        |
| L Russell, Sir C. ....               | Hackney, South.                |
| C Russell, Sir George ....           | Berks, E.—Wokingham.           |
| DL Russell, T. W. ....               | Tyrone, South.                 |
| C Salt, T. ....                      | Stafford.                      |
| L Samuelson, Sir B. ....             | Oxfordshire, North.            |
| L Samuelson, Godfrey B. ....         | Glo'stershire, Forest of Dean. |
| C Sandys, Colonel T. M. ....         | Lancashire, S.W.—Bootle.       |
| C Saunderson, Colonel E. J. ....     | Armagh, North.                 |
| L Schwann, C. E. ....                | Manchester, North.             |
| L Seale-Hayne, C. H. ....            | Devon, Mid (Ashburton).        |
| C Selwyn, Captain C. W. ....         | Cambs., North (Wisbeach).      |
| C Seton-Karr, H. ....                | St. Helens.                    |
| N Sexton, T. ....                    | Belfast, West.                 |
| L Shaw-Lefevre, Right Hn. G. J. .... | Bradford, Central.             |
| L Shaw, T. ....                      | Halifax.                       |
| C Shaw-Stewart, M. H. ....           | Renfrewshire, East.            |
| N Sheehan, J. D. ....                | Kerry, East.                   |
| N Sheehy, D. ....                    | Galway, South.                 |
| N Sheil, E. ....                     | Meath, South.                  |
| C Shepherd-Cross, H. ....            | Bolton.                        |
| L Shirley, W. S. ....                | Yorks., W.R., S.—Doncaster.    |
| C Sidebotham, J. W. ....             | Cheshire, Hyde.                |
| C Sidebottom, T. H. ....             | Stalybridge.                   |
| C Sidebottom, Captain W. ....        | Derbyshire, High Peak.         |
| L Simon, Serjeant. ....              | Dewsbury.                      |
| DL Sinclair, W. P. ....              | Falkirk Burghs.                |
| L Slagg, J. ....                     | Burnley.                       |
| C Slaney, Colonel Kenyon. ....       | Shropshire, North.             |
| C Smith, Abel ....                   | Hertfordshire, East.           |
| C Smith, David ....                  | Brighton.                      |
| L Smith, Samuel ....                 | Flintshire.                    |
| C Smith, Right Hon. W. H. ....       | Strand.                        |
| C Smith-Barry, A. H. ....            | Huntingdon, South.             |
| L Spencer, Hon. C. R. ....           | Northamptonshire, Mid.         |
| C Spencer, J. E. ....                | West Bromwich.                 |
| N Stack, J. ....                     | Kerry, North.                  |
| C Stanhope, Right Hon. E. ....       | Lincolnshire, S., Lindsey.     |
| L Stanhope, Hon. P. ....             | Wednesbury.                    |
| C Stanley, E. J. ....                | Somerset, Bridgwater.          |
| L Stansfeld, Right Hon. J. ....      | Halifax.                       |
| L Stepney, Sir A. ....               | Carmarthen, District.          |

## HOUSE OF COMMONS.

| Member.                            | Constituency.               |
|------------------------------------|-----------------------------|
| C Stephens, H. C. ....             | Middlesex, Hornsey.         |
| L Stevenson, F. S. ....            | Suffolk, N.E.               |
| L Stevenson, J. C. ....            | South Shields.              |
| L Stewart, Halley ....             | Lincolnshire, Spalding.     |
| C Stewart, M. J. ....              | Kirkcudbrightshire.         |
| C Stokes, George Gabriel ....      | Cambridge University.       |
| L Storey, S. ....                  | Sunderland.                 |
| DL Story-Maskelyne, M. H. N. ....  | Wiltshire, North.           |
| L Stuart, J. ....                  | Shoreditch, Hoxton.         |
| C Stuart-Wortley, C. B. ....       | Sheffield, Hallam.          |
| N Sullivan, D. ....                | Westmeath, South.           |
| N Sullivan, Right Hon. T. D. ....  | Dublin, College Green.      |
| L Summers, W. ....                 | Huddersfield.               |
| L Sutherland, A. ....              | Sutherlandshire.            |
| DL Sutherland, T. ....             | Greenock.                   |
| C Swetenham, E. ....               | Carnarvon District.         |
| L Swinburne, Sir J. ....           | Stafford, Lichfield.        |
| C Sykes, Christopher ....          | Yorkshire, E.R., Buckrose.  |
| DL Talbot, C. R. M. ....           | Glamorganshire, Mid.        |
| C Talbot, J. G. ....               | Oxford University.          |
| N Tanner, C. K. ....               | Cork County, Mid.           |
| C Tapling, T. K. ....              | Leicestershire, South.      |
| DL Taylor, F. ....                 | Norfolk, South.             |
| C Temple, Sir R. ....              | Worcestershire, South.      |
| C Theobald, J. ....                | Essex, S. (Romford).        |
| L Thomas, A. ....                  | Glamorganshire, East.       |
| DL Thorburn, W. ....               | Peebles and Selkirk.        |
| C Tollemache, H. J. ....           | Cheshire, Eddisbury.        |
| C Tomlinson, W. E. M. ....         | Preston.                    |
| C Townsend, F. ....                | Warwickshire, S.W.          |
| L Trevelyan, Right Hon. G. O. .... | Glasgow, Bridgeton.         |
| C Trotter, H. J. ....              | Colchester.                 |
| N Tuite, J. ....                   | Westmeath, North.           |
| C Tyler, Sir H. ....               | Great Yarmouth.             |
| C Tyssen-Amherst, W. A. ....       | Norfolk, S.W.               |
| DL Vernon, Hon. G. R. ....         | Ayrshire, South.            |
| DL Villiers, Right Hon. C. P. .... | Wolverhampton, South.       |
| C Vincent, C. E. Howard ....       | Sheffield, Central.         |
| DL Vivian, Sir Hussey ....         | Swansea District.           |
| L Waddy, S. D. ....                | Lincolnshire, North, Brigg. |
| L Wallace, R. ....                 | Edinburgh, East.            |



## HOUSE OF COMMONS.

| Member.                           | Constituency.                  |
|-----------------------------------|--------------------------------|
| c Walrond, Lieut.-Col. W. H. .... | Devonshire, N.W., Tiverton.    |
| c Walsh, Hon. A. H. J. ....       | Radnorshire.                   |
| L Wardle, H. ....                 | Derbyshire, South.             |
| c Waring, Colonel T. ....         | Down County, North.            |
| L Warmington, C. M. ....          | Monmouthshire, West.           |
| DL Watkin, Sir E. ....            | Hythe.                         |
| c Watson, J. ....                 | Shrewsbury.                    |
| L Watt, Hugh ....                 | Glasgow, Camlachie.            |
| L Wayman, T. ....                 | Yorkshire, W.R., N., Elland.   |
| c Webster, Sir R. E. ....         | Isle of Wight.                 |
| c Webster, R. G. ....             | St. Pancras, East.             |
| DL West, W. Cornwallis ....       | Denbighs., W. (V. of Clwyd).   |
| c Weymouth, Viscount ....         | Somerset, Frome.               |
| c Wharton, J. L. ....             | Yorkshire, W.R., East Ripon.   |
| L Whitbread, S. ....              | Bedford.                       |
| c White, J. Bazley ....           | Gravesend.                     |
| c Whitley, E. ....                | Liverpool, Everton.            |
| c Whitmore, C. A. ....            | Chelsea.                       |
| DL Wiggin, H. ....                | Staffordshire, Handsworth.     |
| L Will, J. Shiress. ....          | Montrose Burghs.               |
| L Williams, A. J. ....            | Glamorganshire, South.         |
| DL Williams, J. Powell ....       | Birmingham, South.             |
| L Williamson, J. ....             | Lancashire, N., Lancaster.     |
| L Williamson, S. ....             | Kilmarnock District.           |
| L Wilson, C. H. ....              | Hull, West.                    |
| L Wilson, H. J. ....              | Yorkshire, W.R., S. Holmfirth  |
| L Wilson, I. ....                 | Middlesbrough.                 |
| c Wilson, Sir Samuel. ....        | Portsmouth.                    |
| c Winn, Hon. Rowland ....         | Pontefract.                    |
| DL Winterbotham, A. B. ....       | Gloucester, East.              |
| DL Wodehouse, E. R. ....          | Bath.                          |
| DL Wolmer, Viscount ....          | Hampshire, East.               |
| c Wood, Colonel N. ....           | Durham, Houghton-le-Spring.    |
| L Woodall, W. ....                | Hanley.                        |
| L Woodhead, J. ....               | Yorks., W.R., E., Spen Valley. |
| c Worms, Baron H. De ....         | Liverpool, East Toxteth.       |
| L Wright, C. ....                 | Lancashire., S.W., Leigh.      |
| c Wright, H. S. ....              | Nottingham, South.             |
| c Wroughton, P. ....              | Berkshire, North.              |
| c Yerburgh, R. A. ....            | Chester.                       |
| L Yeo, F. A. ....                 | Glamorganshire, West.          |
| c Young, C. E. Baring. ....       | Christchurch.                  |

## STAMPS, TAXES, EXCISE DUTIES, &amp;c.

## STAMP DUTIES, &amp;c.

|                                                                                                                            | £       | s.        | d. |
|----------------------------------------------------------------------------------------------------------------------------|---------|-----------|----|
| AGREEMENT, or Memorandum of Agreement, under hand only, not otherwise charged .....                                        | 0       | 0         | 6  |
| APPRAISEMENT, or VALUATION of any estate or effects where the amount of the appraisement shall not exceed £5.....          | 0       | 0         | 3  |
| Not exceeding £10 .....                                                                                                    | 0       | 0         | 6  |
| „ 20 .....                                                                                                                 | 0       | 1         | 0  |
| „ 30 .....                                                                                                                 | 0       | 1         | 6  |
| „ 40 .....                                                                                                                 | 0       | 2         | 0  |
| Exceeding £500 .....                                                                                                       | 1       | 0         | 0  |
| APPRENTICESHIP INDENTURES—If no premium .....                                                                              | 0       | 2         | 6  |
| For every £5, and fractional part .....                                                                                    | 0       | 5         | 0  |
| ARMORIAL BEARINGS .....                                                                                                    | 1       | 1         | 0  |
| If used on any carriage .....                                                                                              | 2       | 2         | 0  |
| ARTICLES of clerkship to attorney or solicitor in England or Ireland ....                                                  | 80      | 0         | 0  |
| In Superior Courts, Scotland .....                                                                                         | 60      | 0         | 0  |
| BILLS OF EXCHANGE AND PROMISSORY NOTES, of any kind whatsoever except bank notes—Not exceeding £5 .....                    | 0       | 0         | 1  |
| Exceeding £5 and not exceeding £10.....                                                                                    | 0       | 0         | 2  |
| „ 10                   „ 25.....                                                                                           | 0       | 0         | 3  |
| „ 25                   „ 50.....                                                                                           | 0       | 0         | 6  |
| „ 50                   „ 75.....                                                                                           | 0       | 0         | 9  |
| „ 75                   „ 100.....                                                                                          | 0       | 1         | 0  |
| Every £100, and also for any fractional part of £100, of such amount..                                                     | 0       | 1         | 0  |
| By Stamp Act of 1850 (33 and 34 Vict., c. 97), the distinction between inland and foreign bills of exchange was abolished. |         |           |    |
| BILL OF LADING.....                                                                                                        | 0       | 0         | 6  |
| CERTIFICATE—Of goods, &c., being duly entered inwards .....                                                                | 0       | 4         | 0  |
| Of birth, marriage, or death (certified copy of) .....                                                                     | 0       | 1         | 0  |
| DRAFT, or Order, or Letter of Credit, for payment of any sum to bearer or order, on demand .....                           | 0       | 0         | 1  |
| CHARTER PARTY.....                                                                                                         | 0       | 0         | 6  |
| LEGACY AND SUCCESSION DUTY above £20:—Lineal issue or lineal ancestor .....                                                | £1      | per cent. |    |
| Brothers and sisters of the deceased, and their descendants .....                                                          | £3      | per cent. |    |
| Brothers and sister of the father and mother of the deceased, and their descendants .....                                  | £5      | per cent. |    |
| Brothers and sisters of a grandfather or grandmother of the deceased, and their descendants .....                          | £6      | per cent. |    |
| Any other person.....                                                                                                      | £10     | per cent. |    |
| Legacy to husband or wife .....                                                                                            | Exempt. |           |    |
| MARRIAGE LICENSE, special, England and Ireland .....                                                                       | 5       | 0         | 0  |
| „ not special .....                                                                                                        | 0       | 10        | 0  |
| PASSPORT .....                                                                                                             | 0       | 0         | 6  |



## STAMPS, TAXES, EXCISE DUTIES, ETC.

## PATENT FOR INVENTIONS (LETTERS).

|                                                                                            |     |    |    |
|--------------------------------------------------------------------------------------------|-----|----|----|
| <i>Up to Sealing :—</i>                                                                    | £   | s. | d. |
| On application for provisional protection..                                                | 1   | 0  | 0  |
| On filing complete specification .....                                                     | 3   | 0  | 0  |
| Or on filing complete specification with first application.....                            | 4   | 0  | 0  |
| <i>Before the end of four years from date of Patent :—</i>                                 |     |    |    |
| On certificate of renewal .....                                                            | 50  | 0  | 0  |
| <i>Before the end of seven years :—</i>                                                    |     |    |    |
| On certificate of renewal .....                                                            | 100 | 0  | 0  |
| <i>In lieu of the fees of £50 and £100 the following annual fees :—</i>                    |     |    |    |
| Before the expiration of the 4th, 5th, 6th, and 7th years from the date<br>of patent ..... | 10  | 0  | 0  |
| 8th and 9th ditto .....                                                                    | 15  | 0  | 0  |
| 10th, 11th, 12th, and 13th ditto .....                                                     | 20  | 0  | 0  |
| RECEIPT, £2 or upwards (penalty for giving receipt without stamp, £10)..                   | 0   | 0  | 1  |

## HOUSE DUTY.

|                                                                                                                                                                        |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|
| On inhabited houses of the annual value of £20, occupied as a farmhouse,<br>public-house, coffee-shop, shop, or warehouse, a duty of 6d. in the £;<br>all others ..... | 0 | 0 | 9 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|

## INCOME TAX.

Incomes of £150 per annum (Schedules A C D and E) and upwards are taxed at the rate of 6d. in the £. Farmers in England (Schedule B), 3d. in the £; in Scotland and Ireland, 2½d. in the £.

*Exemption and Abatement.*—Incomes less than £150 a year are exempt.

On incomes amounting to £150 a year and less than £400 a year there is an abatement upon £120 of assessed income.

## VARIOUS EXCISE LICENSES AND DUTIES.

|                                                                                                                                     |    |    |   |
|-------------------------------------------------------------------------------------------------------------------------------------|----|----|---|
| On a license to be taken out by a brewer for sale .....                                                                             | 1  | 0  | 0 |
| Occupiers of houses not exceeding £10 annual value .....                                                                            | 0  | 4  | 0 |
| "    "    "    "    £8    "    ..... (exempt)                                                                                       |    |    |   |
| Upon every 36 gals. of worts of a specific gravity of 1·057 deg., the duty of                                                       | 0  | 6  | 3 |
| <b>BEER RETAILERS :—</b>                                                                                                            |    |    |   |
| Beer not drunk on the premises .....                                                                                                | 1  | 5  | 0 |
| Beer drunk on the premises .....                                                                                                    | 3  | 10 | 0 |
| If the annual value of the publican's house in which the retailer shall<br>reside or retail spirits is under £10, the duty is ..... | 4  | 10 | 0 |
| If £10, and under £15 .....                                                                                                         | 6  | 0  | 0 |
| "    15,    "    20 .....                                                                                                           | 8  | 0  | 0 |
| "    20,    "    25 .....                                                                                                           | 11 | 0  | 0 |
| "    25,    "    30 .....                                                                                                           | 14 | 0  | 0 |
| "    30,    "    40 .....                                                                                                           | 17 | 0  | 0 |
| "    40,    "    50 .....                                                                                                           | 20 | 0  | 0 |
| "    50,    "    100 .....                                                                                                          | 25 | 0  | 0 |

## POSTAL REGULATIONS, SAVINGS BANKS, ETC.

|                                                                                                             | £ | s. | d. |
|-------------------------------------------------------------------------------------------------------------|---|----|----|
| Dogs of any kind (penalty £5).....                                                                          | 0 | 7  | 6  |
| Game licenses, if taken out after 31st July and before 1st November, to expire on 31st July following ..... | 3 | 0  | 0  |
| After 31st July, expire 31st October .....                                                                  | 2 | 0  | 0  |
| After 31st October, expire 31st July .....                                                                  | 2 | 0  | 0  |
| Gamekeepers .....                                                                                           | 2 | 0  | 0  |
| „ Deputation of .....                                                                                       | 0 | 10 | 0  |
| Game Dealer's License .....                                                                                 | 2 | 0  | 0  |
| Gun (License to carry) .....                                                                                | 0 | 10 | 0  |
| Hawkers and Pedlars, per year—travelling with a horse or an ass .....                                       | 4 | 0  | 0  |
| If more than one horse, for each.....                                                                       | 4 | 0  | 0  |
| House Agents, letting furnished houses above £25 a year .....                                               | 2 | 0  | 0  |
| Medicine (Patent) Dealers, &c.—For each license .....                                                       | 0 | 5  | 0  |
| Passenger vessels, on board which liquors and tobacco are sold, yearly ..                                   | 5 | 0  | 0  |
| Pawnbrokers .....                                                                                           | 7 | 10 | 0  |
| Retailers of sweets.....                                                                                    | 1 | 5  | 0  |
| Retailers of cider and perry .....                                                                          | 1 | 5  | 0  |
| Retailers of wine, England and Ireland.....                                                                 | 2 | 10 | 0  |
| „ (Grocers) Scotland .....                                                                                  | 2 | 4  | 1  |
| Tobacco and snuff, dealers in .....                                                                         | 0 | 5  | 3  |
| Vinegar makers .....                                                                                        | 5 | 5  | 0  |

## POSTAL REGULATIONS, SAVINGS BANKS, &amp;c.

## RATES OF POSTAGE.

To and from all parts of the United Kingdom, for prepaid letters :—

|                                      |          |                                      |           |
|--------------------------------------|----------|--------------------------------------|-----------|
| Not exceeding 1 oz. ....             | 1d.      | Exceeding 6 oz., not exceeding 8 oz. | 3d.       |
| Exceeding 1 oz., not exceeding 2 oz. | 1½d.     | „ 8 „ „                              | 10 „ 3½d. |
| „ 2 „ „                              | 4 „ 2d.  | „ 10 „ „                             | 12 „ 4d.  |
| „ 4 „ „                              | 6 „ 2½d. | „ 12 „ „                             | 14 „ 4½d. |

and so on at the rate of ½d. for every additional 2 oz.

A letter posted unpaid is chargeable on delivery with double postage, and a letter posted insufficiently paid is chargeable with double the deficiency.

No letter is to exceed one foot six inches in length, nine inches in width, and six inches in depth, unless it be sent to or from a Government Office.

A penny stamp is now issued which can be used either as a postage or receipt stamp.

## INLAND BOOK POST.

The Book Post rate is one halfpenny for every 2 oz. or fraction of 2 oz. Every Book Packet must be posted either without a cover or in a cover entirely open at the ends. No Book Packet may exceed 5 lb. in weight, or one foot six inches in length, nine inches in width, and six inches in depth, unless it be sent to or from a Government Office.



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 POSTAL REGULATIONS, SAVINGS BANKS, ETC.
 

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Any Book Packet which is found to contain a letter, or communication of the nature of a letter (not being a circular letter), or not wholly printed, or any enclosure sealed or in any way closed against inspection, or any other enclosure not allowed by the regulations of the Book Post, will be treated as a letter, and charged double the deficiency of the letter postage.

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## POSTAGE ON INLAND REGISTERED NEWSPAPERS.

*Prepaid Rate.*—On each Registered Newspaper, whether posted singly or in a packet, the postage when prepaid is one halfpenny; but a packet containing two or more Registered Newspapers is not chargeable with a higher rate of postage than would be chargeable on a Book Packet of the same weight—viz., one halfpenny for every 2 oz. or fraction of 2 oz.

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## POST CARDS.

Post Cards, bearing a halfpenny impressed stamp, are available for transmission between places in the United Kingdom only. They are sold at 7d., or of finer quality at 8d., per doz. They can also be had in smaller numbers or singly. Reply Cards are now sold.

Foreign Postal Cards, 1d., 1½d., and 2d. each.

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## POST-OFFICE TELEGRAMS.

The charge for telegrams throughout the United Kingdom is 6d. for the first twelve words, which must include addresses of sender and receiver. It is not, however, necessary to telegraph sender's address; and, by this omission, an average of seven words may be sent for 6d.

Free addresses are abolished; numbers in addresses are counted as one word. After the first twelve words the charge is one halfpenny a word.

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For the rates charged for foreign telegrams, see the Post-office Guide, published quarterly.

## MONEY ORDERS FOR THE UNITED KINGDOM.

Money Orders are granted in the United Kingdom at the following rates:—

|                                                   |     |
|---------------------------------------------------|-----|
| For a sum not exceeding £1 .....                  | 2d. |
| For a sum exceeding £1 and not exceeding £2 ..... | 3d. |
| "      "      £2      "      "      £4 .....      | 4d. |
| "      "      £4      "      "      £7 .....      | 5d. |
| "      "      £7      "      "      £10 .....     | 6d. |

## POSTAL REGULATIONS, SAVINGS BANKS, ETC.

## MONEY ORDERS PAYABLE ABROAD.

Money Orders, payable abroad, are issued in the United Kingdom at the following rates:—

If payable in France, Switzerland, Belgium, Norway, Denmark, Germany, Heligoland, Italy, the Netherlands, Malta, Gibraltar, Constantinople, Smyrna, &c., and most of our Possessions and Colonies—

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| On sums not exceeding £2 .. .. 6d.     | Above £5, and not exceeding £7 1s. 6d.  |
| Above £2, and not exceeding £5 1s. 0d. | Above £7, and not exceeding £10 2s. 0d. |

## POSTAL ORDERS.

Postal Orders are issued at the following rates: on those for 1/- and 1/6 the charge is  $\frac{1}{2}$ d.; for 2/-, 2/6, 3/-, 3/6, 4/-, 4/6, 5/-, 7/6, 10/-, 10/6, the charge is 1d.; for 15/- and 20/-,  $1\frac{1}{2}$ d.

## INLAND PARCEL POST.—POSTING OF PARCELS.

Parcels must be handed in at a Post-office Counter, and must not be dropped into a Letter Box. If a Parcel marked "Parcel Post" is not posted in accordance with this regulation it will be charged on delivery with a fine of 1d.

## POSTAGE.

All Parcels must be prepaid by stamps affixed by the senders, and the rates of postage are as follows:—

|                                                                          | s. | d.              |
|--------------------------------------------------------------------------|----|-----------------|
| For a Parcel not exceeding 1 lb. in weight.....                          | 0  | 3               |
| For a Parcel exceeding 1 lb. in weight and not exceeding 2 lbs.          | 0  | $4\frac{1}{2}$  |
| "          "          2 lbs.   "          "          "          3 lbs.   | 0  | 6               |
| "          "          3 lbs.   "          "          "          4 lbs.   | 0  | $7\frac{1}{2}$  |
| "          "          4 lbs.   "          "          "          5 lbs.   | 0  | 9               |
| "          "          5 lbs.   "          "          "          6 lbs.   | 0  | $10\frac{1}{2}$ |
| "          "          6 lbs.   "          "          "          7 lbs.   | 1  | 0               |
| "          "          7 lbs.   "          "          "          8 lbs.   | 1  | $1\frac{1}{2}$  |
| "          "          8 lbs.   "          "          "          9 lbs.   | 1  | 3               |
| "          "          9 lbs.   "          "          "          10 lbs.  | 1  | $4\frac{1}{2}$  |
| "          "          10 lbs.   "          "          "          11 lbs. | 1  | 6               |

## LIMITATION OF WEIGHT.

No Parcel exceeding 11 lbs. in weight can be received for transmission.



## POSTAL REGULATIONS, SAVINGS BANKS, ETC.

## LIMITATION OF SIZE.

No Parcel may exceed 3 ft. 6 in. in length, or 6 ft. in length and girth combined. Thus, a Parcel 3 ft. 6 in. in length may not measure more than 2 ft. 6 in. in girth at its widest part; but a parcel of shorter length, say 3 ft., or 2 ft. 8 in., may measure respectively 3 ft. or 3 ft. 4 in. in its widest girth.

## INSURANCE AND COMPENSATION.

The Postmaster-General will give Compensation for the Loss and Damage of Inland Parcels according to the following scale, viz.:—

1. Where no fee except Postage is paid the Postmaster-General will give Compensation to an amount not exceeding..... £1
2. Where in addition to the Postage an Insurance Fee of 1d. is paid, the Postmaster-General will give Compensation to an amount not exceeding ..... £5
3. Where in addition to the Postage an Insurance Fee of 2d. is paid the Postmaster-General will give Compensation to an amount not exceeding ..... £10

In no case will a larger amount of Compensation than £10 be paid. The Compensation given in case of damage will be in proportion to that which would have been given had the Parcel been lost.

No legal liability to give compensation in respect of any Parcel will attach to the Postmaster-General, either personally or in his official capacity, and whether or not an insurance fee has been paid. Accordingly the decision of the Postmaster-General as to all questions of Compensation will be final.

## INLAND PATTERN AND SAMPLE POST.

Trade Patterns and Samples of Merchandise may be sent between places in the United Kingdom at the following rates of postage:—

|                                                  |      |
|--------------------------------------------------|------|
| For a Packet not exceeding 4 oz.....             | 1d.  |
| „ „ more than 4 oz. but not exceeding 6 oz. .... | 1½d. |
| „ „ „ 6 oz. „ „ 8 oz. ....                       | 2d.  |

No Packet to exceed 8 oz. in weight. Limits of dimension are—12 ft. by 8 ft. 4 in. If either of these conditions be infringed the Packet will not be forwarded, but returned to the sender; similar conditions as to insufficiently paid postage obtain in connection with the above.

## REGISTRATION.

By the prepayment of a fee of twopence, any letter, newspaper, or book packet may be registered to any place in the United Kingdom or the British Colonies. Registered letter envelopes, bearing a twopenny stamp embossed on the flap for the payment of the registration fee, are to be purchased of different sizes.

## REGISTERS OF BIRTHS, MARRIAGES, AND DEATHS. BANK HOLIDAYS.

Registered Letters are now insured against loss or damage, according to the following scale :—

An amount not exceeding £2, on payment of registration fee only.

„ „ £10, „ a fee of 2d. in addition to registration fee.

## POST-OFFICE SAVINGS BANKS.

No deposit of less than a shilling is received, nor any pence, and not more than £30 in one year. No further deposit is allowed when the amount standing in depositor's name exceeds £150, exclusive of interest. Interest is allowed at the rate of  $2\frac{1}{2}$  per cent (or sixpence in the pound) per annum—that is at the rate of one halfpenny per pound per month. When the principal and interest reach to £200, no further interest is paid until the sum at the depositor's credit is reduced below that amount.

At every Post-office in the United Kingdom forms for making small deposits are now issued gratuitously. Each form has twelve divisions, in each of which a penny postage stamp can be placed; when the twelve are filled in it is received at any Post-office Savings Bank as a shilling.

Any person can now invest, at any Post-office Savings Bank, small sums in Government Stock. Not less than £10, and not more than £100, in any one year. The amount held by any one investor must not exceed £300.

## REGISTERS OF BIRTHS, MARRIAGES, AND DEATHS.

These are now kept at Somerset House, and may be searched on payment of the fee of one shilling. If a certified copy of any entry be required, the charge for that, in addition to the shilling for the search, is two shillings and sevenpence, which includes a penny for stamp duty. The registers contain an entry of births, deaths, and marriages since 1st July, 1837.

## BANK HOLIDAYS.

*England and Ireland.*—Easter Monday, the Monday in Whitsun week, first Monday in August, the twenty-sixth day of December (or the twenty-seventh should the twenty-sixth be a Sunday).

*Scotland.*—New Year's Day, Christmas Day (if either of the above days falls on a Sunday, the following Monday shall be a Bank Holiday); Good Friday, first Monday in May, first Monday in August.



## LAW SITTINGS. ECLIPSES. TRANSFER AND DIVIDEND DAYS.

## LAW SITTINGS, 1888.

|                      | Begin.           | End.      |
|----------------------|------------------|-----------|
| Hilary Sittings..... | January 11 ..... | March 28. |
| Easter „ .....       | April 10 .....   | May 18.   |
| Trinity „ .....      | May 29 .....     | Aug. 13.  |
| Michael. „ .....     | October 24 ..... | Dec. 21.  |

## ECLIPSES.

In the year 1888 there will be three eclipses of the sun and two of the moon:—

- 1.—A total eclipse of the moon, January 28th and 29th, visible at Greenwich.
- 2.—A partial eclipse of the sun, February 11th and 12th, invisible at Greenwich.
- 3.—A partial eclipse of the sun, July 9th, invisible at Greenwich.
- 4.—A total eclipse of the moon, July 23rd, partly visible at Greenwich.
- 5.—A partial eclipse of the sun, August 7th, visible at Greenwich.

## TRANSFER AND DIVIDEND DAYS AT THE BANK, 1888.

| NAME OF STOCK.                          | DIVIDENDS PAYABLE.        | PUBLIC DAYS<br>OF TRANSFER.                    |
|-----------------------------------------|---------------------------|------------------------------------------------|
| Three per Cent Consols .....            | January 5 and July 5....  | Tuesday,<br>Wednesday,<br>Thursday,<br>Friday. |
| New 3½ per Cent, 1854.....              |                           |                                                |
| New 2½ per Cent .....                   |                           |                                                |
| Indian 5 per Cent Stock .....           |                           |                                                |
| Bank Stock.....                         | April 5 and October 5.... |                                                |
| Annuities for 30 years .....            |                           |                                                |
| Indian 4 per Cent Stock .....           |                           |                                                |
| Three per Cent Reduced .....            |                           |                                                |
| New Three per Cent .....                | April 1 and October 1.... |                                                |
| India Bonds .....                       |                           |                                                |
| India 4 per Cent Transfer Loan Stock .. |                           |                                                |
| Red Sea and India Telegraph Annuities.. |                           |                                                |
|                                         | February 4 and August 4.. |                                                |

Hours for buying and selling 10 to 1; transferring 11 to half-past 2; accepting and payment of dividends 9 to 3. On Saturdays the Transfer Offices are closed at 1 o'clock.

The dividends are paid one day after the dates named.

## REMARKS ON THE WEATHER.

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OCTOBER, 1886.—During the first twelve days, and from the 19th, it was warm—in fact, the month was warmer than in any October back to 1861.

NOVEMBER.—The weather was generally unsettled, and the temperature variable; the fall of rain was less than the average; the latter part of the month was cloudy, foggy, and dull.

DECEMBER.—During this month the weather for the most part was dull and cold; snow fell, more or less, during the whole month.

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JANUARY, 1887.—Until the 18th the weather was very cold, and snow fell frequently; rainfall was small; fogs frequent, particularly in the Midlands.

FEBRUARY.—In this month the weather was cold and dry, with frequent sharp frosts at night, from the 6th to the 18th; the fall of rain was small; snow fell on a few days, and fog was rather prevalent.

MARCH.—Until the 21st the weather was very cold, with severe frosts each night; snow was general over the country on nearly every one of these days.

APRIL.—The weather was very cold and dry, the fall of rain small, a very ungenial month, and vegetation very backward.

MAY was, generally speaking, cold, sunless, and unseasonable, with an unusual prevalence of north, north-east, and north-west winds; snow, rain, and hail fell at some places on the 21st and 22nd; the fall of rain was below the average.

JUNE.—The weather was very fine and dry, with a predominance of north-east winds; rain was deficient, falling generally on the 3rd and 4th, then scarcely any afterwards until the end of the month.

JULY.—The weather was very fine and warm; the temperature of the air was above its average; the fall of rain was much below the average; the drought beginning June 4th was broken on July 4th; the hay crop was gathered without rain.



## REMARKS ON THE WEATHER.

AUGUST was fine and dry, with a more than average amount of sunshine; the temperature of the air was a little below the average at the beginning of the month.

SEPTEMBER.—The weather in this month was cold and unsettled, the temperature of the air being below its average; the fall of rain varied, being above its average in some places whilst it was below it in others.

The mean temperature of the six months ending May, 1887, was 40·4 degrees. The following are the instances back to 1800 of mean temperature at about or lower than that year:—In 1879 it was 39·4 degrees; 1875, 40·5; 1847, 39·2; 1823, 40·6; 1816, 40·3; 1814, 38·2; 1800, 40·6. It will thus be seen that there have only been four instances of somewhat lower temperature than was experienced, namely, 1879, 1847, 1816, and 1814.

The mean temperature of March, April, and May, however, furnish a still more remarkable comparison. The mean temperature of these three months from 116 years' observation is 46·6 degrees, and from forty-six years' is 47·1 degrees. Back to 1800, the instances of the mean temperature of the three months ending May of about or of lower value than in this year are as follow:—In 1887 it was 43·8 degrees; 1845, 43·6; 1837, 40·9; 1819, 43·3; 1816, 43·8; 1814, 43·9; 1812, 43·7.

From the foregoing it will be observed that we must go back forty-two years for so low a temperature in these most important months for vegetation; and we further notice that there is only one instance of a decidedly lower temperature than we experienced in the quarter named.

Up to the end of September the average fall of rain from the seventy-two years' previous observations is 18·1 inches, and the fall this year is 13·6, being 4·5 inch short of the average back to 1815. The following are the instances of less rain in the nine months ending September:—

In 1884 it was 13·48 inches.  
In 1874 it was 12·80 inches.  
In 1870 it was 10·88 inches.  
In 1864 it was 12·40 inches.

In 1861 it was 12·90 inches.  
In 1854 it was 13·30 inches.  
In 1847 it was 11·80 inches.  
In 1840 it was 13·30 inches.

## MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1887.

(From Official Sources.)

## ROYAL OBSERVATORY, GREENWICH.—HEIGHT OF STATION ABOVE SEA LEVEL 159 FEET.

| YEAR 1886-7. | Month.        | PRESSURE OF ATMOSPHERE IN MONTH. |        | TEMPERATURE OF AIR IN MONTH. |         |        |                 |                |              | MEAN TEMPERATURE. |            | MEAN READING OF THERMOMETER. |                   |                         | RAIN.             |  |
|--------------|---------------|----------------------------------|--------|------------------------------|---------|--------|-----------------|----------------|--------------|-------------------|------------|------------------------------|-------------------|-------------------------|-------------------|--|
|              |               | Mean.                            | Range. | Highest.                     | Lowest. | Range. | of all Highest. | of all Lowest. | Daily Range. | Air.              | Dew Point. | Maximum in Rays of Sun.      | Minimum on Grass. | Number of days it fell. | Amount Collected. |  |
| 1886         |               | In.                              | In.    | Deg.                         | Deg.    | Deg.   | Deg.            | Deg.           | Deg.         | Deg.              | Deg.       | Deg.                         | Deg.              |                         | In.               |  |
|              | October ..... | 29·618                           | 1·755  | 79·2                         | 38·0    | 41·2   | 60·5            | 47·1           | 13·4         | 53·3              | 49·2       | 92·4                         | 40·6              | 14                      | 1·41              |  |
|              | November .... | 29·732                           | 1·745  | 59·1                         | 26·9    | 32·2   | 49·5            | 38·0           | 11·5         | 44·0              | 41·1       | 65·9                         | 32·2              | 15                      | 3·02              |  |
|              | December .... | 29·522                           | 2·218  | 54·1                         | 17·3    | 36·8   | 41·4            | 31·2           | 10·2         | 36·5              | 32·7       | 49·7                         | 26·6              | 18                      | 3·60              |  |
| 1887         |               |                                  |        |                              |         |        |                 |                |              |                   |            |                              |                   |                         |                   |  |
|              | January ..... | 29·831                           | 1·846  | 52·5                         | 15·5    | 37·0   | 40·2            | 30·6           | 9·6          | 35·6              | 32·9       | 51·4                         | 28·0              | 14                      | 1·15              |  |
|              | February .... | 30·145                           | 0·967  | 54·9                         | 19·7    | 35·2   | 45·4            | 32·5           | 12·9         | 38·9              | 33·8       | 74·2                         | 28·2              | 4                       | 0·53              |  |
|              | March .....   | 29·891                           | 1·567  | 57·2                         | 22·1    | 35·1   | 45·3            | 31·2           | 14·1         | 37·6              | 32·1       | 81·2                         | 25·9              | 10                      | 1·35              |  |
|              | April .....   | 29·818                           | 1·378  | 67·2                         | 25·3    | 41·9   | 55·0            | 35·3           | 19·7         | 44·1              | 36·3       | 103·1                        | 30·0              | 11                      | 1·75              |  |
|              | May .....     | 29·834                           | 1·058  | 69·4                         | 32·3    | 37·1   | 59·0            | 42·3           | 16·7         | 49·8              | 43·5       | 105·1                        | 36·8              | 18                      | 1·72              |  |
|              | June .....    | 30·012                           | 0·889  | 83·7                         | 42·5    | 41·2   | 73·4            | 49·7           | 23·7         | 60·9              | 51·3       | 128·8                        | 48·8              | 3                       | 1·23              |  |
|              | July .....    | 29·866                           | 0·719  | 92·2                         | 44·8    | 47·4   | 80·5            | 54·1           | 26·4         | 66·5              | 53·7       | 142·8                        | 47·7              | 10                      | 1·29              |  |
|              | August .....  | 29·807                           | ·890   | 89·5                         | 41·0    | 48·5   | 75·5            | 51·7           | 23·8         | 62·5              | 50·8       | 131·7                        | 44·3              | 9                       | 2·35              |  |
|              | September.... | 29·759                           | 1·201  | 70·7                         | 33·6    | 37·1   | 62·9            | 46·9           | 16·0         | 54·0              | 47·9       | 108·5                        | 39·9              | 16                      | 2·21              |  |



## MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1887.

(From Official Sources.)

THE OBSERVATORY, LIVERPOOL.—HEIGHT OF STATION ABOVE SEA LEVEL 197 FEET.

| YEAR 1886-7.    | PRESSURE OF ATMOSPHERE IN MONTH. |       | TEMPERATURE OF AIR IN MONTH. |          |         |        |                 |                | MEAN TEMPERATURE. |            | MEAN READING OF THERMOMETER. |                   | RAIN.                   |                   |
|-----------------|----------------------------------|-------|------------------------------|----------|---------|--------|-----------------|----------------|-------------------|------------|------------------------------|-------------------|-------------------------|-------------------|
|                 | Month.                           | Mean. | Range.                       | Highest. | Lowest. | Range. | MEAN            |                | Air.              | Dew Point. | Maximum in Rays of Sun.      | Minimum on Grass. | Number of days it fell. | Amount Collected. |
|                 |                                  |       |                              |          |         |        | of all Highest. | of all Lowest. |                   |            |                              |                   |                         |                   |
| 1886            | In.                              | In.   | Deg.                         | Deg.     | Deg.    | Deg.   | Deg.            | Deg.           | Deg.              | Deg.       | * Deg.                       | * Deg.            | In.                     | In.               |
| October .....   | 29.545                           | 1.749 | 72.0                         | 40.4     | 31.6    | 57.0   | 48.3            | 8.7            | 51.7              | 47.6       | 91.0                         | 41.2              | 22                      | 5.01              |
| November .....  | 29.642                           | 1.795 | 56.9                         | 38.7     | 18.2    | 49.5   | 42.2            | 7.3            | 45.3              | 41.9       | 69.3                         | 33.4              | 23                      | 3.13              |
| December .....  | 29.406                           | 2.652 | 53.7                         | 21.2     | 32.5    | 42.2   | 33.9            | 8.3            | 37.9              | 33.4       | 60.2                         | 22.4              | 25                      | 3.85              |
| 1887            |                                  |       |                              |          |         |        |                 |                |                   |            |                              |                   |                         |                   |
| January .....   | 29.701                           | 1.825 | 5.29                         | 24.5     | 28.4    | 41.8   | 33.3            | 8.5            | 37.5              | 33.9       | 56.1                         | 26.5              | 16                      | 1.96              |
| February .....  | 30.047                           | 1.216 | 55.4                         | 25.4     | 30.1    | 44.8   | 34.5            | 10.3           | 39.2              | 34.3       | 73.0                         | 27.9              | 9                       | 0.95              |
| March .....     | 29.859                           | 1.545 | 53.9                         | 27.0     | 26.9    | 43.9   | 34.2            | 9.7            | 38.2              | 33.2       | 89.5                         | 25.0              | 8                       | 1.27              |
| April .....     | 29.794                           | 1.510 | 56.7                         | 31.8     | 24.9    | 49.8   | 37.9            | 11.9           | 42.6              | 34.2       | 101.0                        | 30.0              | 11                      | 0.99              |
| May .....       | 29.834                           | 1.244 | 66.0                         | 37.0     | 29.0    | 54.7   | 43.9            | 10.8           | 47.8              | 41.1       | 113.3                        | 37.9              | 13                      | 1.80              |
| June .....      | 29.984                           | 0.724 | 80.6                         | 42.8     | 37.8    | 68.5   | 53.2            | 15.3           | 59.3              | 48.8       | 128.2                        | 45.0              | 4                       | 1.42              |
| July .....      | 29.796                           | 0.909 | 82.9                         | 49.2     | 33.7    | 70.1   | 56.7            | 13.4           | 61.8              | 51.1       | 135.4                        | 48.5              | 14                      | 1.10              |
| August .....    | 29.753                           | 1.081 | 80.1                         | 46.4     | 33.7    | 67.6   | 53.4            | 14.2           | 59.2              | 47.5       | 129.8                        | 45.2              | 13                      | 1.90              |
| September ..... | 29.682                           | 1.575 | 65.0                         | 42.6     | 22.4    | 59.1   | 49.5            | 9.6            | 53.1              | 45.9       | 123.3                        | 41.8              | 19                      | 4.07              |

\* The Mean temperature inserted in these two columns is taken from the Returns of Stonyhurst College, Lancashire, as they were not supplied by Liverpool. The height of station above sea level is 363 feet.

## MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1887.

*(From Official Sources.)*

## THE OBSERVATORY, CARLISLE (SPITAL).—HEIGHT OF STATION ABOVE SEA LEVEL 114 FEET.

| YEAR 1886-7.  | PRESSURE OF ATMOS-<br>PHERE IN MONTH. |        | TEMPERATURE OF AIR IN MONTH. |          |         |        |                    |                   | MEAN<br>TEMPERATURE. |               | MEAN READING<br>OF THERMOMETER. |                         | RAIN. |                               |                           |
|---------------|---------------------------------------|--------|------------------------------|----------|---------|--------|--------------------|-------------------|----------------------|---------------|---------------------------------|-------------------------|-------|-------------------------------|---------------------------|
|               | Month.                                | Mean.  | Range.                       | Highest. | Lowest. | Range. | MEAN               |                   | Air.                 | Dew<br>Point. | Maximum<br>in Rays<br>of Sun.   | Minimum<br>on<br>Grass. |       | Number<br>of days<br>it fell. | Amount<br>Col-<br>lected. |
|               |                                       |        |                              |          |         |        | of all<br>Highest. | of all<br>Lowest. |                      |               |                                 |                         |       |                               |                           |
| 1886          |                                       | In.    | In.                          | Deg.     | Deg.    | Deg.   | Deg.               | Deg.              | Deg.                 | Deg.          | Deg.                            | Deg.                    |       | In.                           |                           |
| October ..... |                                       | 29.646 | 1.808                        | 69.5     | 33.5    | 36.0   | 58.4               | 44.6              | 13.8                 | 51.0          | 77.9                            | 34.4                    | 19    | 3.98                          |                           |
| November .... |                                       | 29.667 | 1.682                        | 58.3     | 31.0    | 27.3   | 49.2               | 37.6              | 11.6                 | 44.1          | 62.0                            | 27.6                    | 18    | 3.39                          |                           |
| December .... |                                       | 29.449 | 2.936                        | 52.4     | 4.2     | 48.2   | 40.3               | 26.0              | 14.3                 | 33.8          | 53.2                            | 15.8                    | 17    | 3.54                          |                           |
| 1887          |                                       |        |                              |          |         |        |                    |                   |                      |               |                                 |                         |       |                               |                           |
| January.....  |                                       | 29.745 | 1.817                        | 55.3     | 16.8    | 38.5   | 42.4               | 30.6              | 11.8                 | 37.1          | 53.9                            | 20.0                    | 11    | 1.80                          |                           |
| February .... |                                       | 30.101 | 1.262                        | 63.2     | 19.7    | 43.5   | 47.7               | 32.8              | 14.9                 | 39.8          | 67.9                            | 22.1                    | 9     | 1.34                          |                           |
| March .....   |                                       | 29.903 | 1.510                        | 56.8     | 15.4    | 41.4   | 47.4               | 30.6              | 16.8                 | 39.0          | 78.0                            | 20.2                    | 11    | 1.80                          |                           |
| April .....   |                                       | 29.856 | 1.472                        | 62.8     | 25.0    | 37.8   | 53.2               | 33.2              | 20.0                 | 43.7          | 93.7                            | 22.5                    | 10    | 2.18                          |                           |
| May .....     |                                       | 29.898 | 1.284                        | 72.2     | 27.5    | 44.7   | 60.4               | 40.1              | 20.3                 | 48.9          | 100.4                           | 29.9                    | 11    | 1.38                          |                           |
| June .....    |                                       | 30.051 | 0.686                        | 85.4     | 35.2    | 50.2   | 71.8               | 48.0              | 23.8                 | 59.4          | 107.8                           | 38.1                    | 3     | 0.30                          |                           |
| July .....    |                                       | 29.819 | 1.044                        | 85.8     | 35.3    | 50.5   | 73.2               | 52.3              | 20.9                 | 61.4          | 114.6                           | 42.9                    | 16    | 2.30                          |                           |
| August .....  |                                       | 29.793 | 1.102                        | 80.2     | 34.4    | 45.8   | 69.8               | 47.5              | 22.3                 | 57.7          | 106.9                           | 41.3                    | 13    | 3.66                          |                           |
| September.... |                                       | 29.703 | 1.488                        | 70.6     | 30.7    | 39.9   | 61.8               | 44.2              | 17.6                 | 52.5          | 97.1                            | 39.6                    | 19    | 4.66                          |                           |



## DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1888.

| JANUARY.                 |         |       |      | FEBRUARY.                |         |       |      | MARCH.                   |         |       |      | APRIL.                   |         |       |      | MAY.                     |         |       |      | JUNE.                    |         |       |      |
|--------------------------|---------|-------|------|--------------------------|---------|-------|------|--------------------------|---------|-------|------|--------------------------|---------|-------|------|--------------------------|---------|-------|------|--------------------------|---------|-------|------|
| LIVERPOOL<br>High Water. |         | Date. | Day. | LIVERPOOL<br>High Water. |         | Date. | Day. | LIVERPOOL<br>High Water. |         | Date. | Day. | LIVERPOOL<br>High Water. |         | Date. | Day. | LIVERPOOL<br>High Water. |         | Date. | Day. | LIVERPOOL<br>High Water. |         | Date. | Day. |
| Morn.                    | Aftern. |       |      | Morn.                    | Aftern. |       |      | Morn.                    | Aftern. |       |      | Morn.                    | Aftern. |       |      | Morn.                    | Aftern. |       |      | Morn.                    | Aftern. |       |      |
| h m                      | h m     | 1     | W    | h m                      | h m     | 1     | Th   | h m                      | h m     | 1     | Th   | h m                      | h m     | 1     | Th   | h m                      | h m     | 1     | Th   | h m                      | h m     | 1     | Th   |
| 0 21                     | 1 50    | 2     | F    | 1 29                     | 2 33    | 2     | F    | 1 31                     | 2 13    | 2     | F    | 2 13                     | 2 36    | 2     | F    | 2 44                     | 3 8     | 2     | F    | 4 14                     | 4 46    | 2     | F    |
| 1 1                      | 2 21    | 3     | Th   | 2 11                     | 3 17    | 3     | Th   | 2 13                     | 2 55    | 3     | Th   | 2 59                     | 3 33    | 3     | Th   | 3 35                     | 4 5     | 3     | Th   | 5 20                     | 5 56    | 3     | Th   |
| 1 42                     | 2 47    | 4     | W    | 2 54                     | 3 17    | 4     | W    | 2 55                     | 3 42    | 4     | W    | 3 49                     | 4 20    | 4     | W    | 4 40                     | 5 18    | 4     | W    | 6 33                     | 7 8     | 4     | W    |
| 2 25                     | 3 40    | 5     | F    | 3 40                     | 4 4     | 5     | F    | 3 42                     | 4 39    | 5     | F    | 4 57                     | 5 40    | 5     | F    | 6 1                      | 6 46    | 5     | F    | 7 39                     | 8 9     | 5     | F    |
| 3 10                     | 4 31    | 6     | Th   | 4 31                     | 5 3     | 6     | Th   | 4 39                     | 5 57    | 6     | Th   | 6 29                     | 7 15    | 6     | Th   | 7 25                     | 7 58    | 6     | Th   | 8 36                     | 8 59    | 6     | Th   |
| 4 0                      | 4 30    | 7     | W    | 5 42                     | 6 23    | 7     | W    | 5 57                     | 7 32    | 7     | W    | 7 56                     | 8 32    | 7     | W    | 8 27                     | 8 54    | 7     | W    | 9 20                     | 9 40    | 7     | W    |
| 5 2                      | 5 38    | 8     | F    | 6 23                     | 7 48    | 8     | F    | 6 45                     | 7 32    | 8     | F    | 9 3                      | 9 28    | 8     | F    | 9 17                     | 9 38    | 8     | F    | 10 35                    | 10 17   | 8     | F    |
| 6 16                     | 6 56    | 9     | Th   | 7 7                      | 8 28    | 9     | Th   | 7 14                     | 8 51    | 9     | Th   | 10 10                    | 10 46   | 9     | Th   | 10 30                    | 10 14   | 9     | Th   | 11 11                    | 11 23   | 9     | Th   |
| 7 32                     | 8 8     | 10    | W    | 8 33                     | 9 10    | 10    | W    | 8 51                     | 9 51    | 10    | W    | 10 29                    | 10 46   | 10    | W    | 11 4                     | 10 48   | 10    | W    | 12 46                    |         | 10    | W    |
| 8 40                     | 9 11    | 11    | F    | 9 25                     | 10 48   | 11    | F    | 9 23                     | 10 34   | 11    | F    | 11 3                     | 11 19   | 11    | F    | 12 30                    | 11 20   | 11    | F    | 1 0 4                    | 0 22    | 11    | F    |
| 9 39                     | 10 5    | 12    | Th   | 10 25                    | 11 30   | 12    | Th   | 10 53                    | 11 12   | 12    | Th   | 11 34                    | 11 50   | 12    | Th   | 1 36                     | 11 53   | 12    | Th   | 2 16                     | 2 16    | 12    | Th   |
| 10 30                    | 10 54   | 13    | W    | 11 10                    | 11 50   | 13    | W    | 11 30                    | 11 48   | 13    | W    | 11 34                    | 11 50   | 13    | W    | 2 11                     | 12 3    | 13    | W    | 3 30                     | 3 30    | 13    | W    |
| 11 18                    | 11 41   | 14    | F    | 0 9                      | 0 28    | 14    | F    | 11 30                    | 11 48   | 14    | F    | 11 34                    | 11 50   | 14    | F    | 2 36                     | 12 10   | 14    | F    | 4 24                     | 4 24    | 14    | F    |
| 0 3                      | 0 3     | 15    | Th   | 0 46                     | 1 3     | 15    | Th   | 0 5                      | 0 37    | 15    | Th   | 11 34                    | 11 50   | 15    | Th   | 3 6                      | 12 36   | 15    | Th   | 5 30                     | 5 30    | 15    | Th   |
| 0 26                     | 0 46    | 16    | W    | 1 20                     | 1 53    | 16    | W    | 0 21                     | 0 37    | 16    | W    | 0 52                     | 1 38    | 16    | W    | 3 14                     | 1 16    | 16    | W    | 6 46                     | 6 46    | 16    | W    |
| 1 7                      | 1 26    | 17    | F    | 1 53                     | 2 39    | 17    | F    | 0 52                     | 1 38    | 17    | F    | 0 52                     | 1 38    | 17    | F    | 3 40                     | 1 41    | 17    | F    | 7 51                     | 7 51    | 17    | F    |
| 2 21                     | 2 39    | 18    | Th   | 2 23                     | 3 12    | 18    | Th   | 1 23                     | 2 7     | 18    | Th   | 1 54                     | 2 10    | 18    | Th   | 4 45                     | 2 29    | 18    | Th   | 8 48                     | 8 48    | 18    | Th   |
| 3 15                     | 3 15    | 19    | W    | 3 30                     | 3 50    | 19    | W    | 1 53                     | 2 7     | 19    | W    | 2 27                     | 3 40    | 19    | W    | 5 25                     | 3 40    | 19    | W    | 9 42                     | 9 42    | 19    | W    |
| 3 53                     | 3 53    | 20    | F    | 4 13                     | 4 40    | 20    | F    | 2 24                     | 3 13    | 20    | F    | 3 58                     | 4 32    | 20    | F    | 6 7                      | 4 45    | 20    | F    | 10 37                    | 10 37   | 20    | F    |
| 4 16                     | 4 42    | 21    | Th   | 5 11                     | 5 49    | 21    | Th   | 3 33                     | 3 57    | 21    | Th   | 5 5                      | 5 53    | 21    | Th   | 7 20                     | 5 25    | 21    | Th   | 11 27                    | 11 27   | 21    | Th   |
| 5 11                     | 5 45    | 22    | W    | 6 34                     | 7 17    | 22    | W    | 4 28                     | 5 1     | 22    | W    | 6 42                     | 7 24    | 22    | W    | 8 22                     | 6 46    | 22    | W    | 12 37                    | 12 37   | 22    | W    |
| 5 45                     | 5 45    | 23    | F    | 7 57                     | 8 35    | 23    | F    | 5 42                     | 6 29    | 23    | F    | 7 58                     | 8 30    | 23    | F    | 9 14                     | 7 53    | 23    | F    | 1 6                      | 1 6     | 23    | F    |
| 7 0                      | 7 7     | 24    | Th   | 9 6                      | 9 34    | 24    | Th   | 7 16                     | 7 58    | 24    | Th   | 8 58                     | 9 22    | 24    | Th   | 10 1                     | 8 50    | 24    | Th   | 2 28                     | 2 28    | 24    | Th   |
| 8 43                     | 9 12    | 25    | W    | 9 59                     | 10 21   | 25    | W    | 8 34                     | 9 5     | 25    | W    | 9 31                     | 10 6    | 25    | W    | 10 50                    | 9 38    | 25    | W    | 3 42                     | 3 42    | 25    | W    |
| 9 37                     | 10 0    | 26    | F    | 10 43                    | 11 4    | 26    | F    | 9 31                     | 9 55    | 26    | F    | 10 12                    | 10 50   | 26    | F    | 11 15                    | 10 25   | 26    | F    | 4 54                     | 4 54    | 26    | F    |
| 10 22                    | 10 42   | 27    | Th   | 11 25                    | 11 46   | 27    | Th   | 10 59                    | 10 38   | 27    | Th   | 11 18                    | 11 36   | 27    | Th   | 12 40                    | 11 15   | 27    | Th   | 5 58                     | 5 58    | 27    | Th   |
| 11 24                    | 11 24   | 28    | W    | 0 29                     | 0 8     | 28    | W    | 11 41                    | 11 19   | 28    | W    | 12 12                    | 11 36   | 28    | W    | 1 40                     | 11 40   | 28    | W    | 6 46                     | 6 46    | 28    | W    |
| 11 44                    | 11 44   | 29    | F    | 0 29                     | 0 49    | 29    | F    | 0 3                      | 0 26    | 29    | F    | 0 24                     | 0 47    | 29    | F    | 2 5                      | 12 29   | 29    | F    | 7 51                     | 7 51    | 29    | F    |
| 0 5                      | 0 5     | 30    | Th   | 0 29                     | 0 49    | 30    | Th   | 0 47                     | 1 9     | 30    | Th   | 1 11                     | 1 33    | 30    | Th   | 3 19                     | 1 42    | 30    | Th   | 8 48                     | 8 48    | 30    | Th   |
| 0 26                     | 0 26    | 31    | W    | 0 29                     | 0 49    | 31    | W    | 1 30                     | 1 51    | 31    | W    | 1 56                     | 2 20    | 31    | W    | 3 19                     | 2 54    | 31    | W    | 9 42                     | 9 42    | 31    | W    |

Garston tides 7 minutes later than Liverpool each day.

## DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1888—Continued.

| JULY.                    |      |       |         | AUGUST.                  |      |       |         | SEPTEMBER.               |      |       |         | OCTOBER.                 |      |       |         | NOVEMBER.                |      |       |         | DECEMBER.                |      |       |         |
|--------------------------|------|-------|---------|--------------------------|------|-------|---------|--------------------------|------|-------|---------|--------------------------|------|-------|---------|--------------------------|------|-------|---------|--------------------------|------|-------|---------|
| LIVERPOOL<br>High Water. |      |       |         | LIVERPOOL<br>High Water. |      |       |         | LIVERPOOL<br>High Water. |      |       |         | LIVERPOOL<br>High Water. |      |       |         | LIVERPOOL<br>High Water. |      |       |         | LIVERPOOL<br>High Water. |      |       |         |
| Date.                    | Day. | Morn. | Aftern. | Date.                    | Day. | Morn. | Aftern. | Date.                    | Day. | Morn. | Aftern. | Date.                    | Day. | Morn. | Aftern. | Date.                    | Day. | Morn. | Aftern. | Date.                    | Day. | Morn. | Aftern. |
|                          |      |       |         |                          |      |       |         |                          |      |       |         |                          |      |       |         |                          |      |       |         |                          |      |       |         |
| 1                        | 1    | h m   | h m     | 1                        | M    | h m   | h m     | 1                        | M    | h m   | h m     | 1                        | M    | h m   | h m     | 1                        | M    | h m   | h m     | 1                        | S    | h m   | h m     |
| 2                        | 2    | 4 31  | 6 3     | 2                        | Tu   | 5 27  | 7 17    | 2                        | Tu   | 7 5   | 7 45    | 2                        | Tu   | 7 44  | 8 20    | 2                        | Tu   | 9 8   | 9 26    | 2                        | S    | 9 15  | 9 38    |
| 3                        | 3    | 5 30  | 7 17    | 3                        | W    | 6 40  | 8 25    | 3                        | W    | 8 22  | 8 52    | 3                        | W    | 8 44  | 9 15    | 3                        | W    | 9 15  | 10 7    | 3                        | S    | 10 1  | 10 24   |
| 4                        | 4    | 6 38  | 8 12    | 4                        | Th   | 7 52  | 9 21    | 4                        | Th   | 9 19  | 9 43    | 4                        | Th   | 9 36  | 9 57    | 4                        | Th   | 10 29 | 10 50   | 4                        | S    | 10 50 | 11 15   |
| 5                        | 5    | 7 43  | 9 21    | 5                        | F    | 8 54  | 10 6    | 5                        | F    | 10 4  | 10 24   | 5                        | F    | 10 18 | 10 39   | 5                        | F    | 11 12 | 11 35   | 5                        | S    | 11 39 | 0 30    |
| 6                        | 6    | 8 39  | 10 6    | 6                        | S    | 9 44  | 10 27   | 6                        | S    | 10 45 | 11 6    | 6                        | S    | 10 59 | 11 19   | 6                        | S    | 11 59 | 0 43    | 6                        | W    | 0 54  | 1 19    |
| 7                        | 7    | 9 26  | 10 48   | 7                        | Sa   | 10 27 | 11 23   | 7                        | Sa   | 11 25 | 11 44   | 7                        | Sa   | 11 39 | 0 1     | 7                        | Sa   | 0 22  | 1 39    | 7                        | W    | 1 44  | 2 8     |
| 8                        | 8    | 10 7  | 11 9    | 8                        | Th   | 11 9  | 11 23   | 8                        | Th   | 0 5   | 0 5     | 8                        | Th   | 0 1   | 0 22    | 8                        | Th   | 1 6   | 2 18    | 8                        | F    | 2 33  | 2 57    |
| 9                        | 9    | 10 47 | 11 45   | 9                        | Th   | 11 48 | 0 29    | 9                        | Th   | 0 26  | 0 46    | 9                        | Th   | 0 43  | 1 5     | 9                        | Th   | 1 53  | 3 9     | 9                        | S    | 3 22  | 3 50    |
| 10                       | 10   | 11 26 | 11 45   | 10                       | Th   | 0 8   | 0 29    | 10                       | Th   | 1 6   | 1 27    | 10                       | Th   | 1 26  | 1 47    | 10                       | Th   | 2 43  | 4 12    | 10                       | S    | 4 21  | 4 53    |
| 11                       | 11   | 0 25  | 0 45    | 11                       | F    | 0 48  | 1 8     | 11                       | F    | 1 48  | 2 8     | 11                       | F    | 2 9   | 2 32    | 11                       | F    | 3 38  | 5 3     | 11                       | Th   | 5 28  | 6 5     |
| 12                       | 12   | 1 5   | 1 25    | 12                       | S    | 1 28  | 2 9     | 12                       | S    | 2 30  | 2 52    | 12                       | S    | 2 56  | 3 21    | 12                       | S    | 4 50  | 6 18    | 12                       | Th   | 6 44  | 7 18    |
| 13                       | 13   | 2 6   | 2 49    | 13                       | M    | 2 9   | 2 29    | 13                       | M    | 3 15  | 3 39    | 13                       | M    | 3 50  | 4 27    | 13                       | M    | 6 18  | 7 0     | 13                       | W    | 7 48  | 8 17    |
| 14                       | 14   | 2 27  | 2 49    | 14                       | Th   | 2 37  | 3 4     | 14                       | Th   | 4 7   | 4 42    | 14                       | Th   | 5 10  | 5 57    | 14                       | Th   | 7 34  | 8 7     | 14                       | F    | 8 42  | 9 5     |
| 15                       | 15   | 3 12  | 3 36    | 15                       | Th   | 4 31  | 5 4     | 15                       | Th   | 5 23  | 6 8     | 15                       | Th   | 6 46  | 7 29    | 15                       | Th   | 8 35  | 9 41    | 15                       | S    | 9 27  | 9 46    |
| 16                       | 16   | 4 0   | 4 28    | 16                       | Th   | 5 41  | 6 24    | 16                       | Th   | 6 20  | 7 39    | 16                       | Th   | 7 8   | 8 38    | 16                       | Th   | 9 21  | 10 16   | 16                       | S    | 10 5  | 10 23   |
| 17                       | 17   | 4 59  | 5 33    | 17                       | F    | 6 46  | 7 46    | 17                       | F    | 7 23  | 8 54    | 17                       | F    | 8 50  | 10 9    | 17                       | F    | 10 34 | 11 56   | 17                       | S    | 11 54 | 11 36   |
| 18                       | 18   | 6 11  | 6 48    | 18                       | S    | 7 25  | 8 56    | 18                       | S    | 8 10  | 10 31   | 18                       | S    | 9 50  | 11 17   | 18                       | S    | 11 40 | 0 12    | 18                       | Th   | 0 12  | 0 29    |
| 19                       | 19   | 7 24  | 7 53    | 19                       | Th   | 8 30  | 9 56    | 19                       | Th   | 9 10  | 10 31   | 19                       | Th   | 10 27 | 11 45   | 19                       | Th   | 11 51 | 0 45    | 19                       | F    | 0 47  | 1 5     |
| 20                       | 20   | 8 31  | 9 3     | 20                       | Th   | 9 38  | 10 44   | 20                       | Th   | 10 21 | 11 45   | 20                       | Th   | 11 33 | 11 51   | 20                       | Th   | 0 28  | 1 18    | 20                       | S    | 1 58  | 3 2     |
| 21                       | 21   | 9 32  | 10 0    | 21                       | Th   | 10 49 | 11 29   | 21                       | Th   | 11 27 | 0 3     | 21                       | Th   | 11 33 | 0 7     | 21                       | Th   | 1 18  | 2 22    | 21                       | S    | 2 36  | 3 51    |
| 22                       | 22   | 10 52 | 11 41   | 22                       | W    | 11 49 | 0 30    | 22                       | W    | 0 20  | 0 52    | 22                       | W    | 0 23  | 0 37    | 22                       | W    | 2 1   | 3 17    | 22                       | Th   | 3 26  | 4 51    |
| 23                       | 23   | 11 17 | 11 41   | 23                       | Th   | 0 10  | 1 7     | 23                       | Th   | 0 52  | 1 8     | 23                       | Th   | 0 53  | 1 7     | 23                       | Th   | 3 45  | 4 18    | 23                       | F    | 4 40  | 5 25    |
| 24                       | 24   | 0 28  | 0 50    | 24                       | F    | 0 49  | 1 40    | 24                       | F    | 1 23  | 1 58    | 24                       | F    | 1 23  | 2 11    | 24                       | F    | 4 53  | 5 33    | 24                       | S    | 6 40  | 7 14    |
| 25                       | 25   | 1 11  | 1 51    | 25                       | S    | 1 24  | 2 11    | 25                       | S    | 1 52  | 2 40    | 25                       | S    | 2 23  | 3 19    | 25                       | S    | 6 14  | 6 53    | 25                       | Th   | 7 46  | 8 19    |
| 26                       | 26   | 2 29  | 2 48    | 26                       | Th   | 2 27  | 3 20    | 26                       | Th   | 2 23  | 3 19    | 26                       | Th   | 3 13  | 4 11    | 26                       | Th   | 7 27  | 8 0     | 26                       | F    | 8 48  | 9 16    |
| 27                       | 27   | 3 36  | 3 44    | 27                       | Th   | 3 39  | 4 50    | 27                       | Th   | 3 44  | 5 30    | 27                       | Th   | 4 11  | 6 22    | 27                       | Th   | 8 26  | 8 52    | 27                       | S    | 9 42  | 10 7    |
| 28                       | 28   | 4 57  | 5 37    | 28                       | F    | 4 30  | 5 0     | 28                       | F    | 4 6   | 7 4     | 28                       | F    | 5 8   | 8 11    | 28                       | F    | 8 26  | 8 52    | 28                       | S    | 9 42  | 10 7    |
| 29                       | 29   | 5 37  | 6 20    | 29                       | S    | 5 37  | 6 20    | 29                       | S    | 6 17  | 7 4     | 29                       | S    | 7 8   | 8 11    | 29                       | S    | 8 26  | 8 52    | 29                       | Th   | 9 42  | 10 7    |
| 30                       | 30   | 6 20  | 7 1     | 30                       | Th   | 6 17  | 7 4     | 30                       | Th   | 7 4   | 7 4     | 30                       | Th   | 8 11  | 8 39    | 30                       | Th   | 8 26  | 8 52    | 30                       | F    | 9 42  | 10 7    |
| 31                       | 31   | 7 1   | 8 20    | 31                       | F    | 7 4   | 8 20    | 31                       | F    | 8 11  | 8 39    | 31                       | F    | 8 11  | 8 39    | 31                       | F    | 8 26  | 8 52    | 31                       | S    | 9 42  | 10 7    |

Garston tides 7 minutes later than Liverpool each day.



## DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1888.

| JANUARY.          |          |    | FEBRUARY.         |          |    | MARCH.            |          |    | APRIL.            |           |    | MAY.              |           |    | JUNE.             |          |    |
|-------------------|----------|----|-------------------|----------|----|-------------------|----------|----|-------------------|-----------|----|-------------------|-----------|----|-------------------|----------|----|
| GOOLE High Water. |          |    | GOOLE High Water. |          |    | GOOLE High Water. |          |    | GOOLE High Water. |           |    | GOOLE High Water. |           |    | GOOLE High Water. |          |    |
| Date.             | Day.     |    | Date.             | Day.     |    | Date.             | Day.     |    | Date.             | Day.      |    | Date.             | Day.      |    | Date.             | Day.     |    |
| Morn.             | Aftern.  |    | Morn.             | Aftern.  |    | Morn.             | Aftern.  |    | Morn.             | Aftern.   |    | Morn.             | Aftern.   |    | Morn.             | Aftern.  |    |
| h m 8 36          | h m 8 57 | 1  | h m 9 44          | h m 10 6 | 1  | h m 9 25          | h m 9 47 | 1  | h m 10 31         | h m 10 54 | 1  | h m 11 2          | h m 11 28 | 1  | h m 0 11          | h m 0 44 | 1  |
| 9 17              | 9 36     | 2  | 10 28             | 10 51    | 2  | 10 8              | 10 29    | 2  | 11 18             | 11 44     | 2  | 0 35              | 0 0       | 2  | 1 20              | 1 52     | 2  |
| 9 57              | 10 20    | 3  | 11 12             | 11 36    | 3  | 10 52             | 11 14    | 3  | 11 18             | 0 15      | 3  | 1 13              | 0 0       | 3  | 2 24              | 2 55     | 3  |
| 10 43             | 11 5     | 4  | 11 29             | 0 1      | 4  | 11 27             | 0 36     | 4  | 0 51              | 1 31      | 4  | 3 4               | 2 39      | 4  | 3 25              | 3 53     | 4  |
| 11 29             | 11 57    | 5  | 0 29              | 1 1      | 5  | 0 4               | 0 36     | 5  | 2 11              | 2 51      | 5  | 4 12              | 3 29      | 5  | 4 24              | 4 49     | 5  |
| 0 27              | 0 27     | 6  | 1 37              | 2 15     | 6  | 1 11              | 1 48     | 6  | 3 32              | 4 16      | 6  | 5 9               | 4 41      | 6  | 5 14              | 5 35     | 6  |
| 1 36              | 2 36     | 7  | 2 49              | 3 26     | 7  | 2 26              | 3 6      | 7  | 4 46              | 5 17      | 7  | 6 29              | 5 32      | 7  | 6 22              | 6 14     | 7  |
| 2 43              | 3 46     | 8  | 4 5               | 4 41     | 8  | 3 47              | 4 28     | 8  | 5 43              | 6 5       | 8  | 7 3               | 6 12      | 8  | 7 10              | 6 52     | 8  |
| 3 15              | 4 54     | 9  | 5 16              | 5 48     | 9  | 5 5               | 5 38     | 9  | 6 25              | 6 44      | 9  | 8 10              | 6 47      | 9  | 8 21              | 7 28     | 9  |
| 4 21              | 4 54     | 10 | 6 15              | 6 40     | 10 | 6 6               | 6 29     | 10 | 7 19              | 7 51      | 10 | 9 16              | 7 20      | 10 | 9 34              | 8 3      | 10 |
| 5 26              | 5 54     | 11 | 7 3               | 7 26     | 11 | 6 49              | 7 29     | 11 | 7 35              | 7 51      | 11 | 10 27             | 7 53      | 11 | 10 13             | 8 3      | 11 |
| 6 20              | 6 46     | 12 | 8 46              | 8 45     | 12 | 7 29              | 8 5      | 12 | 8 7               | 8 22      | 12 | 11 8              | 8 27      | 12 | 11 48             | 9 15     | 12 |
| 7 11              | 7 35     | 13 | 9 26              | 8 7      | 13 | 8 5               | 8 22     | 13 | 8 8               | 8 54      | 13 | 12 8              | 8 59      | 13 | 12 13             | 9 54     | 13 |
| 7 59              | 8 21     | 14 | 9 3               | 9 20     | 14 | 8 37              | 8 53     | 14 | 9 9               | 9 24      | 14 | 13 8              | 9 32      | 14 | 13 10             | 10 34    | 14 |
| 8 43              | 9 3      | 15 | 9 36              | 9 53     | 15 | 9 8               | 9 23     | 15 | 9 9               | 9 54      | 15 | 14 8              | 9 32      | 15 | 14 10             | 11 19    | 15 |
| 9 22              | 9 42     | 16 | 10 9              | 10 25    | 16 | 9 38              | 9 54     | 16 | 10 11             | 10 28     | 16 | 15 8              | 10 8      | 16 | 15 10             | 12 11    | 16 |
| 10 2              | 10 21    | 17 | 10 9              | 10 57    | 17 | 10 9              | 10 24    | 17 | 10 11             | 10 28     | 17 | 16 8              | 10 47     | 17 | 16 10             | 13 11    | 17 |
| 10 39             | 10 57    | 18 | 11 13             | 11 31    | 18 | 10 39             | 10 55    | 18 | 11 27             | 11 55     | 18 | 17 8              | 11 35     | 17 | 17 10             | 14 11    | 18 |
| 11 15             | 11 35    | 19 | 11 52             | 0 42     | 19 | 11 13             | 11 33    | 19 | 11 27             | 11 55     | 19 | 18 8              | 11 35     | 18 | 18 10             | 15 11    | 19 |
| 11 56             | 0 15     | 20 | 0 15              | 0 42     | 20 | 11 58             | 11 33    | 20 | 11 27             | 11 55     | 20 | 19 8              | 11 35     | 19 | 19 10             | 16 11    | 20 |
| 0 30              | 0 46     | 21 | 1 13              | 1 45     | 21 | 11 58             | 11 33    | 21 | 11 27             | 11 55     | 21 | 20 8              | 11 35     | 20 | 20 10             | 17 11    | 21 |
| 1 15              | 1 44     | 22 | 2 19              | 2 57     | 22 | 1 35              | 2 12     | 22 | 11 27             | 11 55     | 22 | 21 8              | 11 35     | 21 | 21 10             | 18 11    | 22 |
| 2 16              | 2 48     | 23 | 3 34              | 4 11     | 23 | 2 52              | 3 32     | 23 | 11 27             | 11 55     | 23 | 22 8              | 11 35     | 22 | 22 10             | 19 11    | 23 |
| 3 21              | 3 52     | 24 | 4 47              | 5 20     | 24 | 4 12              | 4 47     | 24 | 11 27             | 11 55     | 24 | 23 8              | 11 35     | 23 | 23 10             | 20 11    | 24 |
| 4 26              | 4 57     | 25 | 5 49              | 6 14     | 25 | 5 19              | 5 46     | 25 | 11 27             | 11 55     | 25 | 24 8              | 11 35     | 24 | 24 10             | 21 11    | 25 |
| 5 26              | 5 52     | 26 | 6 36              | 6 58     | 26 | 6 10              | 6 31     | 26 | 11 27             | 11 55     | 26 | 25 8              | 11 35     | 25 | 25 10             | 22 11    | 26 |
| 6 14              | 6 36     | 27 | 7 20              | 7 43     | 27 | 6 53              | 7 15     | 27 | 11 27             | 11 55     | 27 | 26 8              | 11 35     | 26 | 26 10             | 23 11    | 27 |
| 6 57              | 7 19     | 28 | 8 3               | 8 24     | 28 | 7 36              | 7 58     | 28 | 11 27             | 11 55     | 28 | 27 8              | 11 35     | 27 | 27 10             | 24 11    | 28 |
| 7 40              | 8 1      | 29 | 8 3               | 8 24     | 29 | 8 20              | 8 42     | 29 | 11 27             | 11 55     | 29 | 28 8              | 11 35     | 28 | 28 10             | 25 11    | 29 |
| 8 23              | 8 43     | 30 | 8 45              | 9 5      | 30 | 8 3               | 9 25     | 30 | 11 27             | 11 55     | 30 | 29 8              | 11 35     | 29 | 29 10             | 26 11    | 30 |
| 9 3               | 9 23     | 31 | 9 9               | 10       | 31 | 9 47              | 10 7     | 31 | 11 27             | 11 55     | 31 | 30 8              | 11 35     | 30 | 30 10             | 27 11    | 31 |

Hull Tides 59 minutes earlier than Goole each day.

## DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1888—Continued.

| JULY.             |         |      |       | AUGUST.           |         |      |       | SEPTEMBER.        |         |      |       | OCTOBER.          |         |      |       | NOVEMBER.         |         |      |       | DECEMBER.         |         |      |       |
|-------------------|---------|------|-------|-------------------|---------|------|-------|-------------------|---------|------|-------|-------------------|---------|------|-------|-------------------|---------|------|-------|-------------------|---------|------|-------|
| GOOLE High Water. |         | Day. | Date. | GOOLE High Water. |         | Day. | Date. | GOOLE High Water. |         | Day. | Date. | GOOLE High Water. |         | Day. | Date. | GOOLE High Water. |         | Day. | Date. | GOOLE High Water. |         | Day. | Date. |
| Morn.             | Aftern. |      |       | Morn.             | Aftern. |      |       | Morn.             | Aftern. |      |       | Morn.             | Aftern. |      |       | Morn.             | Aftern. |      |       | Morn.             | Aftern. |      |       |
| h m               | h m     | 1    | 1     | h m               | h m     | 1    | 1     | h m               | h m     | 1    | 1     | h m               | h m     | 1    | 1     | h m               | h m     | 1    | 1     | h m               | h m     | 1    | 1     |
| 0 33              | 1 13    | 2    | 2     | 3 22              | 3 22    | 2    | 2     | 3 21              | 3 21    | 2    | 2     | 3 21              | 3 21    | 2    | 2     | 4 54              | 5 18    | 2    | 2     | 5 53              | 7 31    | 2    | 2     |
| 1 32              | 2 59    | 3    | 3     | 4 35              | 5 34    | 3    | 3     | 4 33              | 4 33    | 3    | 3     | 4 33              | 4 33    | 3    | 3     | 5 41              | 6 44    | 3    | 3     | 6 53              | 8 22    | 3    | 3     |
| 2 31              | 3 57    | 4    | 4     | 5 34              | 6 19    | 4    | 4     | 5 30              | 5 30    | 4    | 4     | 5 30              | 5 30    | 4    | 4     | 6 23              | 7 29    | 4    | 4     | 7 31              | 8 59    | 4    | 4     |
| 3 28              | 4 53    | 5    | 5     | 6 19              | 7 1     | 5    | 5     | 6 12              | 6 12    | 5    | 5     | 6 12              | 6 12    | 5    | 5     | 7 6               | 8 15    | 5    | 5     | 8 22              | 9 46    | 5    | 5     |
| 4 25              | 5 41    | 6    | 6     | 7 1               | 7 42    | 6    | 6     | 6 54              | 6 54    | 6    | 6     | 6 54              | 6 54    | 6    | 6     | 7 15              | 8 25    | 6    | 6     | 9 11              | 10 35   | 6    | 6     |
| 5 18              | 6 22    | 7    | 7     | 7 42              | 8 21    | 7    | 7     | 7 36              | 7 36    | 7    | 7     | 7 36              | 7 36    | 7    | 7     | 8 38              | 9 46    | 7    | 7     | 10 1              | 11 15   | 7    | 7     |
| 6 2               | 7 3     | 8    | 8     | 8 21              | 9 1     | 8    | 8     | 8 18              | 8 18    | 8    | 8     | 8 18              | 8 18    | 8    | 8     | 9 20              | 10 11   | 8    | 8     | 10 51             | 11 45   | 8    | 8     |
| 6 42              | 7 43    | 9    | 9     | 9 1               | 9 43    | 9    | 9     | 8 59              | 8 59    | 9    | 9     | 8 59              | 8 59    | 9    | 9     | 10 4              | 11 31   | 9    | 9     | 11 45             | 0 53    | 9    | 9     |
| 7 23              | 8 21    | 10   | 10    | 9 43              | 10 26   | 10   | 10    | 9 42              | 9 42    | 10   | 10    | 9 42              | 9 42    | 10   | 10    | 10 27             | 0 6     | 10   | 10    | 0 18              | 1 59    | 10   | 10    |
| 8 4               | 9 2     | 11   | 11    | 10 26             | 11 11   | 11   | 11    | 10 27             | 10 27   | 11   | 11    | 10 27             | 10 27   | 11   | 11    | 11 16             | 1 23    | 11   | 11    | 1 27              | 3 2     | 11   | 11    |
| 8 41              | 9 41    | 12   | 12    | 11 11             | 0 37    | 12   | 12    | 11 16             | 11 16   | 12   | 12    | 11 16             | 11 16   | 12   | 12    | 12 2              | 2 39    | 12   | 12    | 2 31              | 4 2     | 12   | 12    |
| 9 20              | 10 23   | 13   | 13    | 0 37              | 1 55    | 13   | 13    | 1 0               | 1 0     | 13   | 13    | 1 0               | 1 0     | 13   | 13    | 1 23              | 3 46    | 13   | 13    | 3 32              | 5 46    | 13   | 13    |
| 10 45             | 11 7    | 14   | 14    | 1 55              | 3 14    | 14   | 14    | 2 23              | 2 23    | 14   | 14    | 2 23              | 2 23    | 14   | 14    | 2 40              | 4 49    | 14   | 14    | 4 30              | 6 20    | 14   | 14    |
| 11 31             | 11 57   | 15   | 15    | 3 14              | 4 33    | 15   | 15    | 3 33              | 3 33    | 15   | 15    | 3 33              | 3 33    | 15   | 15    | 3 56              | 5 14    | 15   | 15    | 5 20              | 7 35    | 15   | 15    |
| 0 58              | 1 32    | 16   | 16    | 4 33              | 5 38    | 16   | 16    | 4 52              | 4 52    | 16   | 16    | 4 52              | 4 52    | 16   | 16    | 5 14              | 6 44    | 16   | 16    | 6 1               | 8 28    | 16   | 16    |
| 1 26              | 2 32    | 17   | 17    | 5 38              | 6 25    | 17   | 17    | 5 44              | 5 44    | 17   | 17    | 5 44              | 5 44    | 17   | 17    | 6 24              | 7 56    | 17   | 17    | 7 17              | 9 38    | 17   | 17    |
| 2 6               | 2 58    | 18   | 18    | 6 25              | 7 8     | 18   | 18    | 6 24              | 6 24    | 18   | 18    | 6 24              | 6 24    | 18   | 18    | 7 18              | 8 28    | 18   | 18    | 8 28              | 10 58   | 18   | 18    |
| 3 8               | 3 39    | 19   | 19    | 7 8               | 7 45    | 19   | 19    | 7 7               | 7 7     | 19   | 19    | 7 7               | 7 7     | 19   | 19    | 8 18              | 9 1     | 19   | 19    | 9 38              | 11 21   | 19   | 19    |
| 4 44              | 4 44    | 20   | 20    | 7 45              | 8 19    | 20   | 20    | 7 34              | 7 34    | 20   | 20    | 7 34              | 7 34    | 20   | 20    | 9 17              | 10 11   | 20   | 20    | 10 16             | 12 37   | 20   | 20    |
| 5 15              | 5 47    | 21   | 21    | 8 19              | 8 51    | 21   | 21    | 8 7               | 8 7     | 21   | 21    | 8 7               | 8 7     | 21   | 21    | 10 8              | 11 42   | 21   | 21    | 11 48             | 0 51    | 21   | 21    |
| 6 15              | 6 41    | 22   | 22    | 8 51              | 9 28    | 22   | 22    | 8 38              | 8 38    | 22   | 22    | 8 38              | 8 38    | 22   | 22    | 11 13             | 12 37   | 22   | 22    | 0 18              | 1 57    | 22   | 22    |
| 7 7               | 7 33    | 23   | 23    | 9 28              | 9 54    | 23   | 23    | 9 39              | 9 39    | 23   | 23    | 9 39              | 9 39    | 23   | 23    | 12 37             | 1 27    | 23   | 23    | 2 31              | 3 30    | 23   | 23    |
| 8 21              | 8 21    | 24   | 24    | 9 54              | 10 25   | 24   | 24    | 10 12             | 10 12   | 24   | 24    | 10 12             | 10 12   | 24   | 24    | 1 10              | 2 27    | 24   | 24    | 3 41              | 4 41    | 24   | 24    |
| 9 6               | 9 6     | 25   | 25    | 10 25             | 10 59   | 25   | 25    | 10 12             | 10 12   | 25   | 25    | 10 12             | 10 12   | 25   | 25    | 2 27              | 3 41    | 25   | 25    | 4 32              | 5 3     | 25   | 25    |
| 9 27              | 9 27    | 26   | 26    | 10 59             | 11 44   | 26   | 26    | 10 47             | 10 47   | 26   | 26    | 10 47             | 10 47   | 26   | 26    | 3 41              | 4 41    | 26   | 26    | 5 3               | 6 57    | 26   | 26    |
| 10 47             | 10 28   | 27   | 27    | 11 44             | 12 37   | 27   | 27    | 11 19             | 11 19   | 27   | 27    | 11 19             | 11 19   | 27   | 27    | 4 41              | 5 3     | 27   | 27    | 6 57              | 8 2     | 27   | 27    |
| 11 6              | 11 6    | 28   | 28    | 12 37             | 1 21    | 28   | 28    | 11 47             | 11 47   | 28   | 28    | 11 47             | 11 47   | 28   | 28    | 5 3               | 6 57    | 28   | 28    | 8 2               | 9 3     | 28   | 28    |
| 10 47             | 11 25   | 29   | 29    | 1 21              | 2 39    | 29   | 29    | 11 47             | 11 47   | 29   | 29    | 11 47             | 11 47   | 29   | 29    | 6 57              | 8 2     | 29   | 29    | 9 3               | 10 58   | 29   | 29    |
| 11 25             | 11 46   | 30   | 30    | 2 39              | 3 41    | 30   | 30    | 12 37             | 12 37   | 30   | 30    | 12 37             | 12 37   | 30   | 30    | 8 2               | 9 3     | 30   | 30    | 10 58             | 12 37   | 30   | 30    |
| 0 34              | 0 9     | 31   | 31    | 3 41              | 4 41    | 31   | 31    | 1 59              | 1 59    | 31   | 31    | 1 59              | 1 59    | 31   | 31    | 9 3               | 10 58   | 31   | 31    | 12 37             | 2 31    | 31   | 31    |
| 0 34              | 0 9     |      |       | 4 41              | 5 3     |      |       | 2 39              | 2 39    |      |       | 2 39              | 2 39    |      |       | 10 58             | 12 37   |      |       | 2 31              | 3 41    |      |       |

Hull Tides 59 minutes earlier than Goole each day.



## A Calendar

FOR ASCERTAINING ANY DAY OF THE WEEK FOR ANY GIVEN TIME WITHIN  
THE PRESENT CENTURY.

| YEARS 1801 TO 1900. |      |      |      |      |      |      |      |      |      |      | 31 Jan. | 28 Feb. | 31 Mar. | 30 April | 31 May. | 30 June | 31 July. | 31 Aug. | 30 Sept. | 31 Oct. | 30 Nov. | 31 Dec. |
|---------------------|------|------|------|------|------|------|------|------|------|------|---------|---------|---------|----------|---------|---------|----------|---------|----------|---------|---------|---------|
| 1801                | 1807 | 1818 | 1829 | 1835 | 1846 | 1857 | 1863 | 1874 | 1885 | 1891 | 4       | 7       | 7       | 3        | 5       | 1       | 3        | 6       | 2        | 4       | 7       | 2       |
| 1802                | 1813 | 1819 | 1830 | 1841 | 1847 | 1858 | 1869 | 1875 | 1886 | 1897 | 5       | 1       | 1       | 4        | 6       | 2       | 4        | 7       | 3        | 5       | 1       | 3       |
| 1803                | 1814 | 1825 | 1831 | 1842 | 1853 | 1859 | 1870 | 1881 | 1887 | 1898 | 6       | 2       | 2       | 5        | 7       | 3       | 5        | 1       | 4        | 6       | 2       | 4       |
| 1805                | 1811 | 1822 | 1833 | 1839 | 1850 | 1861 | 1867 | 1878 | 1889 | 1895 | 2       | 5       | 5       | 1        | 3       | 6       | 1        | 4       | 7        | 2       | 5       | 7       |
| 1806                | 1817 | 1823 | 1834 | 1845 | 1851 | 1862 | 1873 | 1879 | 1890 | ..   | 3       | 6       | 6       | 2        | 4       | 7       | 2        | 5       | 1        | 3       | 6       | 1       |
| 1809                | 1815 | 1826 | 1837 | 1843 | 1854 | 1865 | 1871 | 1882 | 1893 | 1899 | 7       | 3       | 3       | 6        | 1       | 4       | 6        | 2       | 5        | 7       | 3       | 5       |
| 1810                | 1821 | 1827 | 1838 | 1849 | 1855 | 1866 | 1877 | 1883 | 1894 | 1900 | 1       | 4       | 4       | 7        | 2       | 5       | 7        | 3       | 6        | 1       | 4       | 6       |

NOTE.—To ascertain any day of the week in any year of the present century, first look in the table of years for the year required, and under the months are figures which refer to the corresponding figures at the head of the columns of days below. *For example:* To know what day of the week May 4 was on in the year 1876, in the table of years look for 1876, and in a parallel line, under May, is figure 1, which directs to column 1, in which it will be seen that May 4 fell on Thursday.

### LEAP YEARS.

| 1804 | 1832 | 1860 | 1888 | .. | 29 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1804 | 1832 | 1860 | 1888 | 7  | 3  | 4  | 7  | 2  | 5  | 7  | 3  | 6  | 1  | 4  | 6  | .. | .. | .. | .. | .. | .. | .. |
| 1808 | 1836 | 1864 | 1892 | 5  | 1  | 2  | 5  | 7  | 3  | 5  | 1  | 4  | 6  | 2  | 4  | .. | .. | .. | .. | .. | .. | .. |
| 1812 | 1840 | 1868 | 1896 | 3  | 6  | 7  | 3  | 5  | 1  | 3  | 6  | 2  | 4  | 7  | 2  | .. | .. | .. | .. | .. | .. | .. |
| 1816 | 1844 | 1872 | ..   | 1  | 4  | 5  | 1  | 3  | 6  | 1  | 4  | 7  | 2  | 5  | 7  | .. | .. | .. | .. | .. | .. | .. |
| 1820 | 1848 | 1876 | ..   | 6  | 2  | 3  | 6  | 1  | 4  | 6  | 2  | 5  | 7  | 3  | 5  | .. | .. | .. | .. | .. | .. | .. |
| 1824 | 1852 | 1880 | ..   | 4  | 7  | 1  | 4  | 6  | 2  | 4  | 7  | 3  | 5  | 1  | 3  | .. | .. | .. | .. | .. | .. | .. |
| 1828 | 1856 | 1884 | ..   | 2  | 5  | 6  | 2  | 4  | 7  | 2  | 5  | 1  | 3  | 6  | 1  | .. | .. | .. | .. | .. | .. | .. |

| 1           | 2           | 3           | 4           | 5           | 6           | 7           |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Monday 1    | Tuesday 1   | Wednesday 1 | Thursday 1  | Friday 1    | Saturday 1  | SUNDAY 1    |
| Tuesday 2   | Wednesday 2 | Thursday 2  | Friday 2    | Saturday 2  | SUNDAY 2    | Monday 2    |
| Wednesday 3 | Thursday 3  | Friday 3    | Saturday 3  | SUNDAY 3    | Monday 3    | Tuesday 3   |
| Thursday 4  | Friday 4    | Saturday 4  | SUNDAY 4    | Monday 4    | Tuesday 4   | Wednesday 4 |
| Friday 5    | Saturday 5  | SUNDAY 5    | Monday 5    | Tuesday 5   | Wednesday 5 | Thursday 5  |
| Saturday 6  | SUNDAY 6    | Monday 6    | Tuesday 6   | Wednesday 6 | Thursday 6  | Friday 6    |
| SUNDAY 7    | Monday 7    | Tuesday 7   | Wednesday 7 | Thursday 7  | Friday 7    | Saturday 7  |
| Monday 8    | Tuesday 8   | Wednesday 8 | Thursday 8  | Friday 8    | Saturday 8  | SUNDAY 8    |
| Tuesday 9   | Wednesday 9 | Thursday 9  | Friday 9    | Saturday 9  | SUNDAY 9    | Monday 9    |
| Wednes. 10  | Thursday 10 | Friday 10   | Saturday 10 | SUNDAY 10   | Monday 10   | Tuesday 10  |
| Thursday 11 | Friday 11   | Saturday 11 | SUNDAY 11   | Monday 11   | Tuesday 11  | Wednes. 11  |
| Friday 12   | Saturday 12 | SUNDAY 12   | Monday 12   | Tuesday 12  | Wednes. 12  | Thursday 12 |
| Saturday 13 | SUNDAY 13   | Monday 13   | Tuesday 13  | Wednes. 13  | Thursday 13 | Friday 13   |
| SUNDAY 14   | Monday 14   | Tuesday 14  | Wednes. 14  | Thursday 14 | Friday 14   | Saturday 14 |
| Monday 15   | Tuesday 15  | Wednes. 15  | Thursday 15 | Friday 15   | Saturday 15 | SUNDAY 15   |
| Tuesday 16  | Wednes. 16  | Thursday 16 | Friday 16   | Saturday 16 | SUNDAY 16   | Monday 16   |
| Wednes. 17  | Thursday 17 | Friday 17   | Saturday 17 | SUNDAY 17   | Monday 17   | Tuesday 17  |
| Thursday 18 | Friday 18   | Saturday 18 | SUNDAY 18   | Monday 18   | Tuesday 18  | Wednes. 18  |
| Friday 19   | Saturday 19 | SUNDAY 19   | Monday 19   | Tuesday 19  | Wednes. 19  | Thursday 19 |
| Saturday 20 | SUNDAY 20   | Monday 20   | Tuesday 20  | Wednes. 20  | Thursday 20 | Friday 20   |
| SUNDAY 21   | Monday 21   | Tuesday 21  | Wednes. 21  | Thursday 21 | Friday 21   | Saturday 21 |
| Monday 22   | Tuesday 22  | Wednes. 22  | Thursday 22 | Friday 22   | Saturday 22 | SUNDAY 22   |
| Tuesday 23  | Wednes. 23  | Thursday 23 | Friday 23   | Saturday 23 | SUNDAY 23   | Monday 23   |
| Wednes. 24  | Thursday 24 | Friday 24   | Saturday 24 | SUNDAY 24   | Monday 24   | Tuesday 24  |
| Thursday 25 | Friday 25   | Saturday 25 | SUNDAY 25   | Monday 25   | Tuesday 25  | Wednes. 25  |
| Friday 26   | Saturday 26 | SUNDAY 26   | Monday 26   | Tuesday 26  | Wednes. 26  | Thursday 26 |
| Saturday 27 | SUNDAY 27   | Monday 27   | Tuesday 27  | Wednes. 27  | Thursday 27 | Friday 27   |
| SUNDAY 28   | Monday 28   | Tuesday 28  | Wednes. 28  | Thursday 28 | Friday 28   | Saturday 28 |
| Monday 29   | Tuesday 29  | Wednes. 29  | Thursday 29 | Friday 29   | Saturday 29 | SUNDAY 29   |
| Tuesday 30  | Wednes. 30  | Thursday 30 | Friday 30   | Saturday 30 | SUNDAY 30   | Monday 30   |
| Wednes. 31  | Thursday 31 | Friday 31   | Saturday 31 | SUNDAY 31   | Monday 31   | Tuesday 31  |

## A Ready Reckoner.

| No. | $\frac{1}{4}d.$   | $\frac{1}{2}d.$   | $\frac{3}{4}d.$   | 1d. | 2d.  | 3d.  | 4d.  | 5d.  | 6d.   | 7d.  | 8d.   | 9d.  | 10d. | 11d.  | No. |
|-----|-------------------|-------------------|-------------------|-----|------|------|------|------|-------|------|-------|------|------|-------|-----|
| 1   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 2  | 0 3  | 0 4  | 0 5  | 0 6   | 0 7  | 0 8   | 0 9  | 0 10 | 0 11  | 1   |
| 2   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 4  | 0 6  | 0 8  | 0 10 | 1 0   | 1 2  | 1 4   | 1 6  | 1 8  | 1 10  | 2   |
| 3   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 6  | 0 9  | 1 0  | 1 3  | 1 6   | 1 9  | 2 0   | 2 3  | 2 6  | 2 9   | 3   |
| 4   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 8  | 1 0  | 1 4  | 1 8  | 2 0   | 2 4  | 2 8   | 3 0  | 3 4  | 3 8   | 4   |
| 5   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 10 | 1 3  | 1 8  | 2 1  | 2 6   | 2 11 | 3 4   | 3 9  | 4 2  | 4 7   | 5   |
| 6   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 6  | 1 0  | 1 6  | 2 0  | 3 0   | 3 6  | 4 0   | 4 6  | 5 0  | 5 6   | 6   |
| 7   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 7  | 1 2  | 1 9  | 2 4  | 3 6   | 4 1  | 4 8   | 5 3  | 5 10 | 6 5   | 7   |
| 8   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 8  | 1 4  | 2 0  | 2 8  | 3 4   | 4 0  | 4 8   | 5 4  | 6 0  | 6 8   | 8   |
| 9   | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 9  | 1 6  | 2 3  | 3 0  | 3 9   | 4 6  | 5 3   | 6 0  | 6 9  | 7 6   | 9   |
| 10  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 10 | 1 8  | 2 6  | 3 4  | 4 2   | 5 0  | 6 8   | 7 6  | 8 4  | 9 2   | 10  |
| 11  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 0  | 2 9  | 3 8  | 4 7  | 5 6   | 6 5  | 7 4   | 8 3  | 9 2  | 10 1  | 11  |
| 12  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 0  | 3 0  | 4 0  | 5 0  | 6 0   | 7 0  | 8 0   | 9 0  | 10 0 | 11 0  | 12  |
| 13  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 1  | 2 2  | 3 3  | 4 4  | 5 5   | 6 6  | 7 7   | 8 8  | 9 9  | 10 10 | 13  |
| 14  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 2  | 3 6  | 4 8  | 5 10 | 6 7   | 8 2  | 9 4   | 10 6 | 11 8 | 12 10 | 14  |
| 15  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 3  | 3 9  | 5 0  | 6 3  | 7 6   | 8 9  | 10 0  | 11 3 | 12 6 | 13 9  | 15  |
| 16  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 4  | 4 0  | 5 4  | 6 8  | 8 0   | 9 4  | 10 8  | 12 0 | 13 4 | 14 8  | 16  |
| 17  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 5  | 4 3  | 5 8  | 7 1  | 8 6   | 9 11 | 11 4  | 12 9 | 14 2 | 15 7  | 17  |
| 18  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 6  | 4 6  | 6 0  | 7 6  | 9 0   | 10 6 | 12 0  | 13 6 | 15 0 | 16 6  | 18  |
| 19  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 7  | 3 2  | 4 9  | 6 4  | 7 11  | 9 6  | 11 1  | 12 8 | 14 3 | 15 10 | 19  |
| 20  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 8  | 3 4  | 5 0  | 6 8  | 8 4   | 10 0 | 11 8  | 13 4 | 15 0 | 16 8  | 20  |
| 21  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 9  | 3 6  | 5 3  | 7 0  | 8 9   | 10 6 | 12 3  | 14 0 | 15 9 | 17 6  | 21  |
| 22  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 10 | 3 8  | 5 6  | 7 4  | 9 2   | 11 0 | 12 10 | 14 8 | 16 6 | 18 4  | 22  |
| 23  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 1 11 | 3 10 | 5 9  | 7 8  | 9 7   | 11 6 | 13 5  | 15 4 | 17 3 | 19 2  | 23  |
| 24  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 0  | 4 0  | 6 0  | 8 0  | 10 0  | 12 0 | 14 0  | 16 0 | 18 0 | 20 0  | 24  |
| 25  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 1  | 4 2  | 6 3  | 8 4  | 10 5  | 12 6 | 14 7  | 16 8 | 18 9 | 20 10 | 25  |
| 26  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 2  | 4 4  | 6 6  | 8 8  | 10 10 | 13 0 | 15 2  | 17 4 | 19 6 | 21 8  | 26  |
| 27  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 3  | 4 6  | 6 9  | 9 0  | 11 3  | 13 6 | 15 9  | 18 0 | 20 3 | 22 6  | 27  |
| 28  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 4  | 4 8  | 7 0  | 9 4  | 11 8  | 14 0 | 16 4  | 18 8 | 21 0 | 23 4  | 28  |
| 29  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 5  | 4 10 | 7 3  | 9 8  | 12 1  | 14 6 | 16 11 | 19 4 | 21 9 | 24 2  | 29  |
| 30  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 6  | 5 0  | 7 6  | 10 0 | 12 6  | 15 0 | 17 6  | 20 0 | 22 6 | 25 0  | 30  |
| 33  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 2 9  | 5 6  | 8 3  | 11 0 | 13 9  | 16 6 | 19 3  | 22 0 | 24 9 | 27 6  | 33  |
| 36  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 3 0  | 6 0  | 9 0  | 12 0 | 15 0  | 18 0 | 21 0  | 24 0 | 27 0 | 30 0  | 36  |
| 40  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 3 4  | 6 8  | 10 0 | 13 4 | 16 8  | 20 0 | 23 4  | 26 8 | 30 0 | 33 4  | 40  |
| 42  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 3 6  | 7 0  | 10 6 | 14 0 | 17 6  | 21 0 | 24 6  | 28 0 | 31 6 | 35 0  | 42  |
| 45  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 3 9  | 7 6  | 11 3 | 15 0 | 18 9  | 22 6 | 26 3  | 30 0 | 33 9 | 37 6  | 45  |
| 48  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 0  | 8 0  | 12 0 | 16 0 | 20 0  | 24 0 | 28 0  | 32 0 | 36 0 | 40 0  | 48  |
| 50  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 2  | 8 4  | 12 6 | 16 8 | 20 10 | 25 0 | 29 2  | 33 4 | 37 6 | 41 8  | 50  |
| 51  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 3  | 8 6  | 12 9 | 17 0 | 21 3  | 25 6 | 29 9  | 34 0 | 38 3 | 42 6  | 51  |
| 52  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 4  | 8 8  | 13 0 | 17 4 | 21 8  | 26 0 | 30 4  | 34 8 | 39 0 | 43 4  | 52  |
| 53  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 5  | 8 10 | 13 3 | 17 8 | 22 1  | 26 6 | 30 11 | 35 4 | 39 9 | 44 2  | 53  |
| 54  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 6  | 9 0  | 13 6 | 18 0 | 22 6  | 27 0 | 31 6  | 36 0 | 40 6 | 45 0  | 54  |
| 56  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 4 8  | 9 4  | 14 0 | 18 8 | 23 4  | 28 0 | 32 8  | 37 4 | 42 0 | 46 8  | 56  |
| 60  | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 | 5 0  | 10 0 | 15 0 | 20 0 | 25 0  | 30 0 | 35 0  | 40 0 | 45 0 | 50 0  | 60  |

## Wages Table.

| Per Year. | Per Month. | Per Week.          | Per Day.          | Per Year. | Per Month. | Per Week.          | Per Day.           | Per Year. | Per Month. | Per Week.             | Per Day.              |
|-----------|------------|--------------------|-------------------|-----------|------------|--------------------|--------------------|-----------|------------|-----------------------|-----------------------|
| £ s.      | s. d.      | s. d.              | s. d.             | £ s.      | s. d.      | s. d.              | s. d.              | £ s.      | s. d.      | s. d.                 | s. d.                 |
| 0 10      | 0 10       | 0 2 $\frac{1}{4}$  | 0 0 $\frac{1}{4}$ | 8 0       | 0 13 4     | 3 1                | 0 5 $\frac{1}{4}$  | 18 0      | 1 10 0     | 0 6 11                | 0 0 11 $\frac{3}{4}$  |
| 1 0       | 1 8        | 0 4 $\frac{1}{2}$  | 0 0 $\frac{1}{2}$ | 8 8       | 0 14 0     | 3 2 $\frac{1}{2}$  | 0 5 $\frac{1}{2}$  | 18 18     | 1 11 6     | 0 7 5 $\frac{1}{2}$   | 0 1 0 $\frac{1}{2}$   |
| 1 10      | 2 6        | 0 7                | 0 1               | 8 10      | 0 14 2     | 3 3 $\frac{1}{2}$  | 0 5 $\frac{3}{4}$  | 19 0      | 1 11 8     | 0 7 8 $\frac{1}{2}$   | 0 1 0 $\frac{3}{4}$   |
| 2 0       | 3 4        | 0 9 $\frac{1}{2}$  | 0 1 $\frac{1}{2}$ | 9 0       | 0 15 0     | 3 5                | 0 6                | 20 0      | 1 13 4     | 0 7 8 $\frac{1}{2}$   | 0 1 1 $\frac{1}{4}$   |
| 2 2       | 3 6        | 0 9 $\frac{1}{2}$  | 0 1 $\frac{1}{2}$ | 9 9       | 0 15 9     | 3 7 $\frac{1}{2}$  | 0 6 $\frac{1}{2}$  | 30 0      | 2 10 0     | 0 11 6 $\frac{1}{2}$  | 0 1 7 $\frac{1}{2}$   |
| 2 10      | 4 2        | 0 11 $\frac{1}{2}$ | 0 1 $\frac{3}{4}$ | 10 0      | 0 16 8     | 3 10 $\frac{1}{2}$ | 0 6 $\frac{3}{4}$  | 40 0      | 3 6 8      | 0 15 4 $\frac{1}{2}$  | 0 2 2 $\frac{1}{4}$   |
| 3 0       | 5 0        | 1 1 $\frac{1}{2}$  | 0 2               | 10 10     | 0 17 6     | 4 0                | 0 7                | 50 0      | 4 3 4      | 0 19 2 $\frac{1}{2}$  | 0 2 9                 |
| 3 3       | 5 3        | 1 2 $\frac{1}{2}$  | 0 2               | 11 0      | 0 18 4     | 4 3 $\frac{1}{2}$  | 0 7 $\frac{1}{2}$  | 60 0      | 5 0 0      | 1 2 1                 | 0 3 3 $\frac{1}{2}$   |
| 3 10      | 5 10       | 1 4 $\frac{1}{2}$  | 0 2 $\frac{1}{2}$ | 11 11     | 0 19 3     | 4 5 $\frac{1}{2}$  | 0 7 $\frac{3}{4}$  | 70 0      | 5 16 8     | 1 6 11                | 0 3 10                |
| 4 0       | 6 8        | 1 6 $\frac{1}{2}$  | 0 2 $\frac{3}{4}$ | 12 0      | 1 0 0      | 4 7 $\frac{1}{2}$  | 0 8                | 80 0      | 6 13 4     | 1 10 9 $\frac{1}{2}$  | 0 4 4 $\frac{1}{2}$   |
| 4 4       | 7 0        | 1 7 $\frac{1}{2}$  | 0 2 $\frac{3}{4}$ | 12 12     | 1 1 0      | 4 10 $\frac{1}{2}$ | 0 8 $\frac{1}{2}$  | 90 0      | 7 10 0     | 1 14 7 $\frac{1}{2}$  | 0 4 11 $\frac{1}{2}$  |
| 4 10      | 7 6        | 1 8 $\frac{1}{2}$  | 0 3               | 13 0      | 1 1 8      | 5 0                | 0 8 $\frac{3}{4}$  | 100 0     | 8 6 8      | 1 18 5 $\frac{1}{2}$  | 0 5 5 $\frac{1}{2}$   |
| 5 0       | 8 4        | 1 11               | 0 3 $\frac{1}{2}$ | 13 13     | 1 2 9      | 5 3                | 0 9                | 200 0     | 16 13 4    | 3 16 11               | 0 10 11 $\frac{1}{2}$ |
| 5 5       | 8 9        | 2 0 $\frac{1}{2}$  | 0 3 $\frac{3}{4}$ | 14 0      | 1 3 4      | 5 4 $\frac{1}{2}$  | 0 9 $\frac{1}{2}$  | 300 0     | 25 0 0     | 5 15 4 $\frac{1}{2}$  | 0 16 5 $\frac{1}{4}$  |
| 5 10      | 9 2        | 2 1 $\frac{1}{2}$  | 0 3 $\frac{3}{4}$ | 14 14     | 1 4 6      | 5 7 $\frac{1}{2}$  | 0 9 $\frac{3}{4}$  | 400 0     | 33 6 8     | 7 13 10 $\frac{1}{2}$ | 1 1 11                |
| 6 0       | 10 0       | 2 3 $\frac{1}{2}$  | 0 4               | 15 0      | 1 5 0      | 5 9 $\frac{1}{2}$  | 0 9 $\frac{3}{4}$  | 500 0     | 41 13 4    | 9 12 3 $\frac{1}{2}$  | 1 7 4 $\frac{3}{4}$   |
| 6 6       | 10 6       | 2 5                | 0 4 $\frac{1}{2}$ | 15 15     | 1 6 3      | 6 0 $\frac{1}{2}$  | 0 10 $\frac{1}{2}$ | 600 0     | 50 0 0     | 11 10 5 $\frac{1}{2}$ | 1 12 10 $\frac{1}{2}$ |
| 6 10      | 10 10      | 2 6                | 0 4 $\frac{1}{2}$ | 16 0      | 1 6 8      | 6 1 $\frac{1}{2}$  | 0 10 $\frac{1}{2}$ | 700 0     | 58 6 8     | 13 9 2 $\frac{1}{2}$  | 1 18 4 $\frac{1}{4}$  |
| 7 0       | 11 8       | 2 8 $\frac{1}{2}$  | 0 4 $\frac{1}{2}$ | 16 16     | 1 8 0      | 6 5 $\frac{1}{2}$  | 0 11               | 800 0     | 66 13 4    | 15 7 8 $\frac{1}{2}$  | 2 3 10                |
| 7 7       | 12 3       | 2 10               | 0 4 $\frac{1}{2}$ | 17 0      | 1 8 4      | 6 6 $\frac{1}{2}$  | 0 11 $\frac{1}{2}$ | 900 0     | 75 0 0     | 17 6 1 $\frac{1}{2}$  | 2 9 3 $\frac{1}{2}$   |
| 7 10      | 12 6       | 2 10 $\frac{1}{2}$ | 0 5               | 17 17     | 1 9 9      | 6 10 $\frac{1}{2}$ | 0 11 $\frac{1}{2}$ | 1000 0    | 83 6 8     | 19 4 7 $\frac{1}{2}$  | 2 14 9 $\frac{1}{2}$  |



## WEIGHTS AND MEASURES.

## TROY WEIGHT.

|                     | Pennywts.              | Grains.             | gr.  |
|---------------------|------------------------|---------------------|------|
| Ounces.             | 1 =                    | 24                  | dwt. |
| Pound.              | 1 = 20                 | 480                 | oz.  |
| 1                   | = 12 = 240             | = 5760              | lb.  |
| A carat = 4 grains. | 100 Troy ounces = 190½ | Ounces Avoirdupois. |      |

## AVOIRDUPOIS WEIGHT.

|      |      |     |      |       |        |        |      |     |     |     |
|------|------|-----|------|-------|--------|--------|------|-----|-----|-----|
|      |      |     |      |       |        |        |      | dr. | Ty. | gr. |
|      |      |     |      |       |        | oz.    | 1=   | 27  | 11  | 34  |
|      |      | lb. | 1=   |       |        | 16=    | 437  | 16  | 437 | 16  |
|      | st.  | 1=  | 16=  |       |        | 256=   | 7000 |     |     |     |
|      | gr.  | 1=  | 14=  | 224=  |        | 3584   |      |     |     |     |
|      | cwt. | 1=  | 2=   | 28=   | 448=   | 7168   |      |     |     |     |
| Ton. | 1=   | 4=  | 8=   | 112=  | 1792=  | 28672  |      |     |     |     |
| 1=   | 20=  | 80= | 160= | 2240= | 35840= | 573440 |      |     |     |     |
| Ton. | cwt. | gr. | st.  | lb.   | oz.    | dr.    |      | gr. |     |     |

A Cental = 100 pounds. 100 Ounces Avoirdupois = 91⅞ Ounces Troy.

The Apothecaries' Weight is now the same as the Avoirdupois.

## LINEAL MEASURE, OR MEASURE OF LENGTH.

|       | ft.                                    | in.               |
|-------|----------------------------------------|-------------------|
| yds.  | 1 =                                    | 36                |
| pl.   | 1 =                                    | 5¼ = 163 = 198    |
| ch.   | 1 =                                    | 4 = 22 = 66 = 792 |
| fur.  | 1 = 10 = 40 = 220 = 660 = 7920         |                   |
| Mile. | 1 = 8 = 80 = 320 = 1760 = 5280 = 63360 |                   |

A league = 3 miles. A hand = 4 inches. A fathom = 6 feet.

Geographical degree = 60 geographical or nautical miles = 69·121 imper. miles.

Geographical mile = 1·150 imperial miles. A military pace = 2½ feet.

## SOLID OR CUBIC MEASURE.

|                   | Cubic feet.      | Cubic inches. |
|-------------------|------------------|---------------|
| Cubic yard.       | 1 =              | 1728          |
| 1                 | = 27 =           | 46656         |
| 1 Ton of Shipping | = 40 cubic feet. |               |
| 1 Barrel Bulk     | = 5 cubic feet.  |               |

## LIQUID MEASURE OF CAPACITY.

|         | Quarts. | Pints. | Gills. |
|---------|---------|--------|--------|
| Gallon. | 1 =     | 2 =    | 8 =    |
| 1       | = 4 =   | 8 =    | 32 =   |

A hogshead (hhd.) contains 63 gallons. A pipe is 2 hogsheads, and 2 pipes form a tun. All liquids are measured by this table.

## GRAIN MEASURE, &amp;C., OR DRY MEASURE OF CAPACITY.

|                         | Bushels.            | Pecks. | Gallons. |
|-------------------------|---------------------|--------|----------|
| Quarter.                | 1 =                 | 4 =    | 8 =      |
| 1                       | = 8 =               | 32 =   | 64 =     |
| 1 Boll of Wheat         | = 4 bushels nearly. |        |          |
| 1 Boll of Barley        | = 6                 | "      | "        |
| 5 Bushels are a sack.   |                     |        |          |
| 5 Quarters make a load. |                     |        |          |

## SQUARE OR LAND MEASURE.

|            | Sq. yards.                         | Sq. feet. | Sq. in. |
|------------|------------------------------------|-----------|---------|
| Sq. poles. | 1 =                                | 9 =       | 144     |
| Sq. rods.  | 1 = 30¼ =                          | 272¼ =    | 39204   |
| Sq. acre.  | 1 = 40 = 1210 = 10890 = 1568160    |           |         |
| 1          | = 4 = 160 = 4840 = 43560 = 6272640 |           |         |

1 square mile = 640 acres: 36 square yards = 1 rood of building: 100 sq. feet = 1 square of flooring: 272¼ sq. feet = 1 rood of bricklayer's work. The chain with which land is measured is 22 yards long, and 1 sq. chain = 10,000 sq. links, contains 22 × 22 = 484 sq. yards: 10 sq. chains = 1 acre.

## TABLE OF TIME.

|       | Days. | Hours. | Minutes. | Seconds. |
|-------|-------|--------|----------|----------|
|       |       | 1 =    | 60 =     | 3600     |
| Week. | 1 =   | 24 =   | 1440 =   | 86400    |
| 1     | = 7 = | 168 =  | 10080 =  | 604800   |

1 Common Year = 365 days, or 52 weeks 1 day.  
1 Leap Year = 366 days, or 52 weeks 2 days.  
1 Solar Year = 365 days 5 hours 48 minutes 49 seconds.

## GEOGRAPHICAL OR NAUTICAL MEASURE.

|                                           |                                   |
|-------------------------------------------|-----------------------------------|
| 1 Geographical mile =                     | { 1⅓ imperial mile of 6,076 feet. |
| 3 " miles .. =                            | 1 league.                         |
| 60 " miles .. =                           | { 1 degree, marked deg. or [°].   |
| 360 " degs. or about 24,855½ imp. miles = | { Circumference of the earth.     |

## BREAD WEIGHT.

|                                    | lb. | oz. |
|------------------------------------|-----|-----|
| A Peck Loaf weighs .....           | 17  | 6½  |
| A Half Peck Loaf .....             | 8   | 11  |
| A Quarter Loaf .....               | 4   | 5   |
| A Peck or Stone of Flour .....     | 14  | 0   |
| A Bushel of Flour .....            | 56  | 6   |
| A Sack of Flour, or 5 Bushels .... | 280 | 0   |

## USEFUL WEIGHTS.

The following Table will be found useful when it is desired to ascertain the weight of a letter or other article, and suitable weights are not at hand. The weight given is that of coins fairly worn; allowance must be made if those used be new or very old.

|            |                                       |
|------------|---------------------------------------|
| 1 oz. .... | Halfpenny and threepenny piece.       |
| ½ " ....   | One penny piece.                      |
| ⅓ " ....   | Florin and sixpence.                  |
| ¼ " ....   | Three pennies.                        |
| 2 " ....   | 4 half-crowns and one shilling.       |
| 4 " ....   | 4 florins, 4 half-crowns, 2½ pennies. |

## BOOKS.

|                                  | Pages. | Leaves. | Sheets. |
|----------------------------------|--------|---------|---------|
| Folio Books .....                | 4 or 2 | make    | 1       |
| Quarto, or 4to .....             | 8      | "       | 4       |
| Octavo, 8vo. ....                | 16     | "       | 8       |
| Duodecimo, or 12mo ..            | 24     | "       | 12      |
| Octodecimo, or 18mo ..           | 36     | "       | 18      |
| 24mo, 32mo, 48mo, 72mo, &c., &c. |        |         |         |

## CO-OPERATIVE CONGRESSES.

| No. | Year. | Date of Opening. | Where Held.                                        | PRESIDENTS.                                     |                              |                               |
|-----|-------|------------------|----------------------------------------------------|-------------------------------------------------|------------------------------|-------------------------------|
|     |       |                  |                                                    | First Day.<br>Inaugural Address<br>delivered by | Second Day.                  | Third Day.                    |
| 1   | 1869  | May 31           | London : Society of Arts, John Street, Adelphi.... | T. Hughes, M.P. ..                              | A. J. Mundella, M.P.         | W. Morrison, M.P.             |
| 2   | 1870  | June 6           | Manchester : Memorial Hall.....                    | W. Morrison, M.P.                               | Rev. W. N. Molesworth, M.A.  | J. T. Hibbert, M.P.           |
| 3   | 1871  | April 10         | Birmingham : Midland Institute .....               | Hon. Auberon Herbert, M.P.                      | C. Cattle <sup>1</sup> ..... | W. Morrison, M.P.             |
| 4   | 1872  | " 1              | Bolton : Co-operative Hall .....                   | T. Hughes, M.P. ..                              | E. V. Neale .....            | W. Morrison, M.P.             |
| 5   | 1873  | " 12             | Newcastle : Mechanics' Institute .....             | Joseph Cowen, jun.                              | W. Morrison, M.P.            | T. Hughes, M.P.               |
| 6   | 1874  | " 6              | Halifax : Mechanics' Hall .....                    | Thos. Brassey, M.P.                             | W. Morrison.....             | W. Morrison.                  |
| 7   | 1875  | March 29         | London : Co-operative Institute .....              | Professor Thorold Rogers.                       | T. Hughes, Q.C. ..           | W. Morrison.                  |
| 8   | 1876  | April 17         | Glasgow : Assembly-rooms, 138, Bath Street....     | * Professor Caird.                              | G. Anderson, M.P.            | Baillie Collins.              |
| 9   | 1877  | " 2              | Leicester : Museum Hall .....                      | Professor Hodgson.<br>Hon. Auberon Herbert.     | Lloyd Jones.....             | Abraham Greenwood.            |
| 10  | 1878  | " 22             | Manchester : Co-operative Hall, Downing Street ..  | Marquis of Ripon ..                             | Bishop of M'nc'hst'r.        | Dr. John Watts.               |
| 11  | 1879  | " 14             | Gloucester : Corn Exchange .....                   | Professor Stuart ..                             | J. T. W. Mitchell..          | James Crabtree.               |
| 12  | 1880  | May 17           | Newcastle-on-Tyne : Bath Lane Schoolroom .....     | Bishop of Durham.                               | R. S. Watson ....            | H. R. Bailey.                 |
| 13  | 1881  | June 6           | Leeds : Albert Hall.....                           | Lord Derby .....                                | T. Hughes, Q.C. ..           | James Crabtree.               |
| 14  | 1882  | May 29           | Oxford : Town Hall .....                           | Lord Reay .....                                 | Councillor Pumphrey.         | George Hines.                 |
| 15  | 1883  | " 14             | Edinburgh : Oddfellows' Hall .....                 | Right Hon. W. E. Baxter, M.P.                   | Wm. Maxwell ....             | John Allan.                   |
| 16  | 1884  | June 2           | Derby : Lecture Hall, Wardwick .....               | Sedley Taylor ....                              | A. Scotton .....             | Councillor Hartley (Lincoln). |
| 17  | 1885  | May 25           | Oldham : Co-operative Hall, King Street .....      | Lloyd Jones.....                                | F. Hardern .....             | Lewis Feber.                  |
| 18  | 1886  | June 14          | Plymouth : Guildhall .....                         | Earl of Morley....                              | A. H. D. Acland, M.P.        | J. H. Young.                  |
| 19  | 1887  | May 30           | Carlisle : Her Majesty's Theatre.....              | G. J. Holyoake ..                               | Sir Wilfrid Lawson, M.P.     | Councillor Rule.              |

\* Professor Caird presided at this Congress; the inaugural address was delivered by Professor Hodgson. In all other cases the chairman for the day delivered the inaugural address.



# PRINCIPAL ARTICLES OF THE CALENDAR,

FOR THE YEAR 1888.

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|                        |                             |
|------------------------|-----------------------------|
| Golden Number.....viii | Dominical Letters ..... A G |
| Epact ..... 17         | Roman Indiction ..... 1     |
| Solar Cycle ..... 21   | Julian Period ..... 6601    |

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## FIXED AND MOVABLE FESTIVALS, ANNIVERSARIES, &c.

|                                      |                                            |
|--------------------------------------|--------------------------------------------|
| Epiphany.....Jan. 6                  | Ascension Day—Holy Thursday .May 10        |
| Septuagesima Sunday ..... ,, 29      | Pentecost—Whit Sunday ..... ,, 20          |
| Quinquagesima—Shrove Sunday .Feb. 12 | Birth of Queen Victoria (1819).. ,, 24     |
| Ash Wednesday ..... ,, 15            | Trinity Sunday ..... ,, 27                 |
| Quadragesima—1st Sun. in Lent. ,, 19 | Corpus Christi..... ,, 31                  |
| St. David .....Mar. 1                | Accession of Queen Victoria (1837) June 20 |
| St. Patrick ..... ,, 17              | Proclamation..... ,, 21                    |
| Annunciation—Lady Day ..... ,, 25    | St. John Baptist—Midsum. Day. ,, 24        |
| Palm Sunday ..... ,, 25              | St. Michael—Michaelmas Day..Sept. 29       |
| Good Friday ..... ,, 30              | Birth of Prince of Wales (1841)..Nov. 9    |
| Easter Sunday .....April 1           | St. Andrew ..... ,, 30                     |
| Low Sunday ..... ,, 8                | First Sunday in Advent .....Dec. 2         |
| St. George ..... ,, 23               | St. Thomas..... ,, 21                      |
| Rogation Sunday .....May 6           | Christmas Day ..... ,, 25                  |

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The Year 5649 of the Jewish Era commences on September 6th, 1888.

Ramadân (Month of Abstinence observed by the Turks) commences on  
May 12th, 1888.

The Year 1306 of the Mohammedan Era commences on September 6th, 1888.

## CALENDAR FOR 1888.

| January. |   |    |    |       | February. |   |    |    |       | March.     |   |    |    |          |
|----------|---|----|----|-------|-----------|---|----|----|-------|------------|---|----|----|----------|
| Sun.     | 1 | 8  | 15 | 22 29 | Sun.      | 5 | 12 | 19 | 26    | Sun.       | 4 | 11 | 18 | 25       |
| Mon.     | 2 | 9  | 16 | 23 30 | Mon.      | 6 | 13 | 20 | 27    | Mon.       | 5 | 12 | 19 | 26       |
| Tu.      | 3 | 10 | 17 | 24 31 | Tu.       | 7 | 14 | 21 | 28    | Tu.        | 6 | 13 | 20 | 27       |
| Wed.     | 4 | 11 | 18 | 25 .. | Wed.      | 1 | 8  | 15 | 22 29 | Wed.       | 7 | 14 | 21 | 28       |
| Th.      | 5 | 12 | 19 | 26 .. | Th.       | 2 | 9  | 16 | 23 .. | Th.        | 1 | 8  | 15 | 22 29    |
| Fri.     | 6 | 13 | 20 | 27 .. | Fri.      | 3 | 10 | 17 | 24 .. | Fri.       | 2 | 9  | 16 | 23 30    |
| Sat.     | 7 | 14 | 21 | 28 .. | Sat.      | 4 | 11 | 18 | 25 .. | Sat.       | 3 | 10 | 17 | 24 31    |
| April.   |   |    |    |       | May.      |   |    |    |       | June.      |   |    |    |          |
| Sun.     | 1 | 8  | 15 | 22 29 | Sun.      | 6 | 13 | 20 | 27    | Sun.       | 3 | 10 | 17 | 24       |
| Mon.     | 2 | 9  | 16 | 23 30 | Mon.      | 7 | 14 | 21 | 28    | Mon.       | 4 | 11 | 18 | 25       |
| Tu.      | 3 | 10 | 17 | 24 .. | Tu.       | 1 | 8  | 15 | 22 29 | Tu.        | 5 | 12 | 19 | 26       |
| Wed.     | 4 | 11 | 18 | 25 .. | Wed.      | 2 | 9  | 16 | 23 30 | Wed.       | 6 | 13 | 20 | 27       |
| Th.      | 5 | 12 | 19 | 26 .. | Th.       | 3 | 10 | 17 | 24 31 | Th.        | 7 | 14 | 21 | 28       |
| Fri.     | 6 | 13 | 20 | 27 .. | Fri.      | 4 | 11 | 18 | 25 .. | Fri.       | 1 | 8  | 15 | 22 29    |
| Sat.     | 7 | 14 | 21 | 28 .. | Sat.      | 5 | 12 | 19 | 26 .. | Sat.       | 2 | 9  | 16 | 23 30    |
| July.    |   |    |    |       | August.   |   |    |    |       | September. |   |    |    |          |
| Sun.     | 1 | 8  | 15 | 22 29 | Sun.      | 5 | 12 | 19 | 26    | Sun.       | 2 | 9  | 16 | 23 30    |
| Mon.     | 2 | 9  | 16 | 23 30 | Mon.      | 6 | 13 | 20 | 27    | Mon.       | 3 | 10 | 17 | 24 ..    |
| Tu.      | 3 | 10 | 17 | 24 31 | Tu.       | 7 | 14 | 21 | 28    | Tu.        | 4 | 11 | 18 | 25 ..    |
| Wed.     | 4 | 11 | 18 | 25 .. | Wed.      | 1 | 8  | 15 | 22 29 | Wed.       | 5 | 12 | 19 | 26 ..    |
| Th.      | 5 | 12 | 19 | 26 .. | Th.       | 2 | 9  | 16 | 23 30 | Th.        | 6 | 13 | 20 | 27 ..    |
| Fri.     | 6 | 13 | 20 | 27 .. | Fri.      | 3 | 10 | 17 | 24 31 | Fri.       | 7 | 14 | 21 | 28 ..    |
| Sat.     | 7 | 14 | 21 | 28 .. | Sat.      | 4 | 11 | 18 | 25 .. | Sat.       | 1 | 8  | 15 | 22 29 .. |
| October. |   |    |    |       | November. |   |    |    |       | December.  |   |    |    |          |
| Sun.     | 7 | 14 | 21 | 28    | Sun.      | 4 | 11 | 18 | 25    | Sun.       | 2 | 9  | 16 | 23 30    |
| Mon.     | 1 | 8  | 15 | 22 29 | Mon.      | 5 | 12 | 19 | 26    | Mon.       | 3 | 10 | 17 | 24 31    |
| Tu.      | 2 | 9  | 16 | 23 30 | Tu.       | 6 | 13 | 20 | 27    | Tu.        | 4 | 11 | 18 | 25 ..    |
| Wed.     | 3 | 10 | 17 | 24 31 | Wed.      | 7 | 14 | 21 | 28    | Wed.       | 5 | 12 | 19 | 26 ..    |
| Th.      | 4 | 11 | 18 | 25 .. | Th.       | 1 | 8  | 15 | 22 29 | Th.        | 6 | 13 | 20 | 27 ..    |
| Fri.     | 5 | 12 | 19 | 26 .. | Fri.      | 2 | 9  | 16 | 23 30 | Fri.       | 7 | 14 | 21 | 28 ..    |
| Sat.     | 6 | 13 | 20 | 27 .. | Sat.      | 3 | 10 | 17 | 24 .. | Sat.       | 1 | 8  | 15 | 22 29 .. |



# January.

## SUNRISE AND SUNSET.

|                                   |                 |                      |                 |
|-----------------------------------|-----------------|----------------------|-----------------|
| 1st Rises at.... 8 8              | Sets at ....4 0 | 15th Rises at....8 2 | Sets at....4 18 |
| 8th „ .... 8 7                    | „ ....4 7       | 22nd „ ....7 55      | „ ....4 29      |
| 29th Rises at 7 46. Sets at 4 41. |                 |                      |                 |

## RISING, SETTING, AND CHANGES OF THE MOON.

|                                          |                   |                         |                   |
|------------------------------------------|-------------------|-------------------------|-------------------|
| 1st Rises at 6 36 p.m.                   | Sets at 9 26 a.m. | 15th Rises at 9 18 a.m. | Sets at 6 52 p.m. |
| 8th „ 2 13 a.m.                          | „ 0 45 p.m.       | 22nd „ 11 57 a.m.       | „ 1 27 a.m.       |
| 29th Rises at 5 31 p.m. Sets at 8 1 a.m. |                   |                         |                   |

|                           |           |                         |            |
|---------------------------|-----------|-------------------------|------------|
| New Moon, 13th .....      | 8 39 a.m. | Full Moon, 28th .....   | 11 19 p.m. |
| First Quarter, 21st ..... | 4 49 p.m. | Last Quarter, 6th ..... | 11 43 a.m. |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.                |
|---------------|--------------|-------|---------------------------------------------------------------|
| 1             | S            |       | <b>First Sunday after Christmas.—New Year's Day</b>           |
| 2             | M            | 1868  | DECIDED TO START SCOTTISH WHOLESALE SOCIETY                   |
| 3             | Tu           | 1882  | W. Harrison Ainsworth died                                    |
| 4             | W            | 1863  | Working Men's College, London, opened                         |
| 5             | Th           | 1815  | Consolidated Fund established                                 |
| 6             | F            |       | <i>Epiphany</i>                                               |
| 7             | S            | 1842  | Retreat from Cabul                                            |
| 8             | S            |       | <b>First Sunday after Epiphany</b>                            |
| 9             | M            |       | Fire Insurance Expires                                        |
| 10            | Tu           | 1840  | Penny Post commenced                                          |
| 11            | W            |       | Hilary Law Sittings begin                                     |
| 12            | Th           | 1829  | Catholic Emancipation Bill passed                             |
| 13            | F            | 1873  | <i>Crumpsall Works Purchased</i>                              |
| 14            | S            |       | <i>Nomination Lists : Last day for receiving [Estab. 1877</i> |
| 15            | S            |       | <b>Second Sunday after Epiphany.—Cork Branch</b>              |
| 16            | M            | 1809  | Battle of Corunna. Sir John Moore killed                      |
| 17            | Tu           | 1706  | Benjamin Franklin born                                        |
| 18            | W            | 1871  | German Empire Proclaimed                                      |
| 19            | Th           | 1796  | James Watt born                                               |
| 20            | F            | 1265  | First English Parliament                                      |
| 21            | S            | 1793  | Louis XVI. guillotined                                        |
| 22            | S            |       | <b>Third Sunday after Epiphany</b>                            |
| 23            | M            | 1875  | Canon Kingsley died                                           |
| 24            | Tu           | 1886  | Joseph Maas, vocalist, died                                   |
| 25            | W            | 1759  | Robert Burns born                                             |
| 26            | Th           | 1869  | Ernest Jones died                                             |
| 27            | F            | 1873  | Professor Sedgwick died                                       |
| 28            | S            | 1871  | Paris capitulated                                             |
| 29            | S            |       | <b>Septuagesima Sunday</b>                                    |
| 30            | M            | 1880  | S.S. "Plover" sold.—King Charles I. beheaded 1649             |
| 31            | Tu           | 1874  | The Ashantees defeated                                        |

# February.

## SUNRISE AND SUNSET.

|                                   |                  |                      |                  |
|-----------------------------------|------------------|----------------------|------------------|
| 1st Rises at....7 41              | Sets at.... 4 48 | 15th Rises at ..7 16 | Sets at.... 5 13 |
| 8th „ ....7 29                    | „ .... 4 50      | 22nd „ ..7 2         | „ .... 5 26      |
| 28th Rises at 6 50. Sets at 5 37. |                  |                      |                  |

## RISING, SETTING, AND CHANGES OF THE MOON.

|                                          |                   |                         |                  |
|------------------------------------------|-------------------|-------------------------|------------------|
| 1st Rises at 9 25 p.m.                   | Sets at 9 33 a.m. | 15th Rises at 8 57 a.m. | Sets at 9 4 p.m. |
| 8th „ 4 53 a.m.                          | „ 1 26 p.m.       | 22nd „ 0 8 p.m.         | „ 3 23 a.m.      |
| 29th Rises at 8 25 p.m. Sets at 0 8 a.m. |                   |                         |                  |

|                           |            |                         |            |
|---------------------------|------------|-------------------------|------------|
| New Moon, 11th .....      | 11 52 p.m. | Full Moon, 27th .....   | 11 58 a.m. |
| First Quarter, 20th ..... | 1 59 a.m.  | Last Quarter, 4th ..... | 7 26 p.m.  |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.                                                                |
|---------------|--------------|-------|---------------------------------------------------------------------------------------------------------------|
| 1             | W            | 1811  | Bell Rock Lighthouse first lighted                                                                            |
| 2             | Th           | 1874  | <i>Tralee Branch C. W. S. Opened.</i> — <i>Candlemas Day</i>                                                  |
| 3             | F            | 1793  | French War commenced                                                                                          |
| 4             | S            | 1852  | Holmfirth Flood                                                                                               |
| 5             | S            |       | <b>Sexagesima Sunday</b>                                                                                      |
| 6             | M            | 1685  | King Charles II. died                                                                                         |
| 7             | Tu           | 1812  | Charles Dickens born                                                                                          |
| 8             | W            |       | Half-quarter day                                                                                              |
| 9             | Th           | 1878  | Victor Emmanuel died                                                                                          |
| 10            | F            | 1840  | Queen Victoria married                                                                                        |
| 11            | S            | 1826  | London University Charter                                                                                     |
| 12            | S            |       | <b>Quinquagesima Sunday</b>                                                                                   |
| 13            | M            | 1847  | Turner, historian died.—Trial of Warren Hastings                                                              |
| 14            | Tu           | 1876  | <i>Opening of N'castle Building, Waterloo St.</i> — <i>Shrove Tues.</i>                                       |
| 15            | W            |       | <i>Ash Wednesday</i>                                                                                          |
| 16            | Th           | 1826  | Lindley Murray died                                                                                           |
| 17            | F            | 1564  | Michael Angelo died                                                                                           |
| 18            | S            | 1546  | Martin Luther died                                                                                            |
| 19            | S            |       | <b>First Sunday in Lent</b>                                                                                   |
| 20            | M            | 1855  | Joseph Hume died; born 1777                                                                                   |
| 21            | Tu           | 1879  | <i>“Pioneer” launched.</i> — <i>N. Y. Branch Estab., 1876—</i><br><i>Voting Lists: Last day for receiving</i> |
| 22            | W            | 1732  | George Washington born                                                                                        |
| 23            | Th           | 1792  | Sir Joshua Reynolds (portrait painter) died                                                                   |
| 24            | F            | 1684  | Handel born [BRANCH SCOTTISH C.W. S. OPENED 1878                                                              |
| 25            | S            |       | <i>N'castle &amp; L'don Branch Quarterly Meet.</i> — <b>KILMARNOCK</b>                                        |
| 26            | S            |       | <b>Second Sunday in Lent</b>                                                                                  |
| 27            | M            | 1807  | H. W. Longfellow born                                                                                         |
| 28            | Tu           | 1874  | Tichborne Trial ended                                                                                         |
| 29            | W            | 1692  | Edward Cave, printer, born.—Leap Year, 1888                                                                   |



# March.

## SUNRISE AND SUNSET.

|                                   |                  |                        |                 |
|-----------------------------------|------------------|------------------------|-----------------|
| 1st Rises at ....6 47             | Sets at ....5 39 | 15th Rises at ....6 16 | Sets at ....6 3 |
| 8th „ ....6 32                    | „ ....5 51       | 22nd „ ....6 0         | „ ....6 15      |
| 29th Rises at 5 44. Sets at 6 26. |                  |                        |                 |

## RISING, SETTING, AND CHANGES OF THE MOON.

|                                           |                   |                         |                  |
|-------------------------------------------|-------------------|-------------------------|------------------|
| 1st Rises at 9 47 p.m.                    | Sets at 8 25 a.m. | 15th Rises at 7 41 a.m. | Sets at 9 0 p.m. |
| 8th „ 4 36 a.m.                           | „ 1 18 a.m.       | 22nd „ 11 41 a.m.       | „ 3 0 a.m.       |
| 29th Rises at 8 44 p.m. Sets at 6 51 a.m. |                   |                         |                  |

|                           |           |                         |           |
|---------------------------|-----------|-------------------------|-----------|
| New Moon, 12th.....       | 4 21 p.m. | Full Moon, 27th .....   | 10 7 p.m. |
| First Quarter, 20th ..... | 8 43 p.m. | Last Quarter, 5th ..... | 3 26 a.m. |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.           |
|---------------|--------------|-------|----------------------------------------------------------|
| 1             | Th           | 1869  | <i>1, Balloon St., Manchester, Warehouse Opened.—St.</i> |
| 2             | F            | 1791  | John Wesley died [David's Day]                           |
| 3             | S            |       | <i>General Quarterly Meeting, Manchester</i>             |
| 4             | S            |       | <b>Third Sunday in Lent</b>                              |
| 5             | M            | 1843  | Thames Tunnel opened                                     |
| 6             | Tu           | 1823  | King of Wurtemberg born                                  |
| 7             | W            | 1883  | Green, historian, died                                   |
| 8             | Th           | 1866  | STOCKTON-ON-TEES CO-OPERATIVE SOCIETY COMMENCED          |
| 9             | F            | 1874  | <i>London Branch Established</i>                         |
| 10            | S            | 1863  | Prince of Wales married                                  |
| 11            | S            |       | <b>Fourth Sunday in Lent</b>                             |
| 12            | M            | 1851  | Owens College opened                                     |
| 13            | Tu           | 1879  | Duke of Connaught married [COMMENCED 1887]               |
| 14            | W            | 1864  | <i>Wholesale Society commenced business.—BATLEY MILL</i> |
| 15            | Th           | 1860  | HECKMONDWIKE CO-OPERATIVE SOCIETY COMMENCED              |
| 16            | F            | 1861  | Duchess of Kent died                                     |
| 17            | S            |       | <i>St. Patrick's Day</i>                                 |
| 18            | S            |       | <b>Fifth Sunday in Lent</b>                              |
| 19            | M            | 1832  | First Reform Bill read a third time                      |
| 20            | Tu           | 1845  | Sir Thomas Potter Knight died                            |
| 21            | W            | 1871  | Princess Louise married                                  |
| 22            | Th           | 1832  | Goethe died                                              |
| 23            | F            | 1821  | National Gallery founded                                 |
| 24            | S            | 1879  | <i>Rouen Branch Opened.—C.W.S. Quarter Day.—ECCLES</i>   |
| 25            | S            |       | <b>Palm Sunday</b> [CO-OP. SOCIETY COMMENCED 1857]       |
| 26            | M            | 1819  | Duke of Cambridge born                                   |
| 27            | Tu           | 1625  | James I. died                                            |
| 28            | W            | 1884  | Duke of Albany died                                      |
| 29            | Th           | 1879  | <i>Trial Trip s.s. "Pioneer."—7TH CONGRESS, LONDON,</i>  |
| 30            | F            |       | <i>Good Friday</i> [1875. Prof. T. ROGERS, Pres.]        |
| 31            | S            | 1883  | SCOTTISH C. W. S. DECIDED TO ERECT BOOT FACTORY          |

# April.

## SUNRISE AND SUNSET.

1st Rises at ....5 38    Sets at ....6 31    15th Rises at....5 7    Sets at ....6 53  
 8th    "    ....5 22    "    ....6 43    22nd    "    ....4 53    "    ....7 6  
 29th Rises at 4 39.    Sets at 7 17.

## RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises at    morn.    Sets at 8 30 a.m.    15th Rises at 7 23 a.m.    Sets at 11 4 p.m.  
 8th    "    4 45 a.m.    "    3 36 p.m.    22nd    "    2 3 p.m.    "    3 29 a.m.  
 29th Rises at 11 32 p.m.    Sets at 5 7 a.m.

New Moon, 11th..... 9 8 a.m.    Full Moon, 26th..... 6 22 a.m.  
 First Quarter, 19th .....11 52 a.m.    Last Quarter, 3rd ..... 0 41 p.m.

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.                                                    |
|---------------|--------------|-------|---------------------------------------------------------------------------------------------------|
| 1             | S            |       | <b>Easter Sunday.</b> —4TH CONGRESS, BOLTON. T. HUGHES, M.P., President, 1872                     |
| 2             | M            | 1877  | 9TH CONGRESS, LEICESTER. Hon. A. HERBERT, Pres.—                                                  |
| 3             | Tu           | 1875  | <i>Liverpool Depot Commenced</i> [Bank Holiday]                                                   |
| 4             | W            | 1774  | Oliver Goldsmith died                                                                             |
| 5             | Th           | 1497  | Canada discovered                                                                                 |
| 6             | F            | 1874  | 6TH CONGRESS, HALIFAX. T. BRASSEY, M.P., President                                                |
| 7             | S            | 1884  | <i>Hamburg Branch Commenced</i>                                                                   |
| 8             | S            |       | <b>Low Sunday</b> [Insurance expires]                                                             |
| 9             | M            | 1877  | LEITH BRANCH SCOTTISH WHOLESALE OPENED.—Fire                                                      |
| 10            | Tu           | 1871  | 3RD CONGRESS, BIRMINGHAM. A. HERBERT, M.P., Pres.                                                 |
| 11            | W            | 1810  | Sir H. Rawlinson born                                                                             |
| 12            | Th           | 1873  | 5TH CONGRESS, NEWCASTLE. J. COWEN, jun., President                                                |
| 13            | F            | 1872  | Samuel Bamford died [Branch Opened]                                                               |
| 14            | S            | 1873  | <i>Nomination Lists: Last day for receiving.</i> —Armagh                                          |
| 15            | S            |       | <b>Second Sunday after Easter</b> [11th CONGRESS,                                                 |
| 16            | M            |       | [GLOUCESTER. Prof. J. STUART, Pres.                                                               |
| 17            | Tu           | 1876  | 8TH CONGRESS, GLASGOW. Professor HODGSON, Pres.                                                   |
| 18            | W            | 1873  | Justus Liebig, chemist, died                                                                      |
| 19            | Th           | 1881  | Lord Beaconsfield died                                                                            |
| 20            | F            | 1868  | SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY ENROLLED                                                  |
| 21            | S            | 1883  | WOMEN'S CO-OPERATIVE LEAGUE FORMED                                                                |
| 22            | S            |       | <b>Third Sunday after Easter.</b> —10TH CONGRESS, MANCHESTER. Marquis of RIPON, President, 1878.— |
| 23            | M            |       | <i>Nottingham Sale Room Opened, 1886</i>                                                          |
| 24            | Tu           | 1866  | <i>Tipperary Branch Opened.</i> —Daniel Defoe died 1731                                           |
| 25            | W            | 1844  | ROCHDALE PIONEERS' SOCIETY COMMENCED                                                              |
| 26            | Th           | 1711  | David Hume, historian, born                                                                       |
| 27            | F            | 1822  | General Grant born                                                                                |
| 28            | S            | 1801  | Earl Shaftesbury born                                                                             |
| 29            | S            |       | <b>Fourth Sunday after Easter</b>                                                                 |
| 30            | M            | 1884  | Sir M. Costa, composer, died                                                                      |



# May.

## SUNRISE AND SUNSET.

1st Rises at ....4 35    Sets at ....7 21    15th Rises at....4 11    Sets at ....7 42  
 8th    „    ....4 22    „    ....7 32    22nd    „    ....4 2    „    ....7 50  
 29th Rises at 3 54.    Sets at 8 1.

## RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises at 0 32 a.m.    Sets at 8 59 a.m.    15th Rises at 7 23 a.m.    Sets at 11 42 p.m.  
 8th    „    3 54 a.m.    „    4 43 p.m.    22nd    „    3 40 p.m.    „    2 49 a.m.  
 29th Rises at 11 56 p.m.    Sets at 7 45 a.m.

New Moon, 11th ..... 1 24 a.m.    Full Moon, 25th ..... 1 40 a.m.  
 First Quarter, 18th .....11 5 p.m.    Last Quarter, 2nd .....11 47 p.m.

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.                                                            |
|---------------|--------------|-------|-----------------------------------------------------------------------------------------------------------|
| 1             | Tu           | 1769  | Duke of Wellington born                                                                                   |
| 2             | W            | 1868  | Thames Embankment opened                                                                                  |
| 3             | Th           | 1494  | Jamaica discovered                                                                                        |
| 4             | F            | 1873  | Dr. Livingstone died                                                                                      |
| 5             | S            | 1821  | Napoleon Bonaparte died                                                                                   |
| 6             | S            |       | <b>Rogation Sunday</b>                                                                                    |
| 7             | M            | 1868  | Lord Brougham died                                                                                        |
| 8             | Tu           | 1860  | Paper Duty abolished                                                                                      |
| 9             | W            | 1873  | John Stuart Mill died.—Half Quarter Day                                                                   |
| 10            | Th           | 1863  | Stonewall Jackson killed                                                                                  |
| 11            | F            | 1812  | Hon. S. Percival assassinated [business                                                                   |
| 12            | S            | 1869  | Co-operative Printing Society, Manchester, commenced                                                      |
| 13            | S            |       | <b>Sunday after Ascension.</b> —Robert Owen born, 1771                                                    |
| 14            | M            | 1883  | 15TH CON., EDINBURGH. W. E. BAXTER, M.P., Pres.                                                           |
| 15            | Tu           | 1847  | Daniel O'Connell died; born August 6th, 1775                                                              |
| 16            | W            | 1871  | Vendome Column destroyed                                                                                  |
| 17            | Th           | 1880  | 12TH CONGRESS, NEWCASTLE. Bishop of DURHAM, Pres.                                                         |
| 18            | F            | 1790  | Royal Literary Fund instituted                                                                            |
| 19            | S            | 790   | Archbishop Dunston died                                                                                   |
| 20            | S            |       | <b>Whit Sunday</b>                                                                                        |
| 21            | M            | 1871  | Fall of Paris.—Bank Holiday [receiving                                                                    |
| 22            | Tu           | 1886  | Death of Lloyd Jones.— <i>Voting Lists: Last day for</i>                                                  |
| 23            | W            | 1883  | Victor Hugo, novelist, died                                                                               |
| 24            | Th           | 1876  | <i>Purchase of s.s. "Plover"</i>                                                                          |
| 25            | F            | 1885  | 17TH CONGRESS, OLDHAM. LLOYD JONES, President                                                             |
| 26            | S            |       | <i>Newcastle and London Branch Quarterly Meetings</i>                                                     |
| 27            | S            |       | <b>Trinity Sunday</b>                                                                                     |
| 28            | M            | 1878  | Earl Russell died. [OXFORD. Lord REAY, Pres., 1882                                                        |
| 29            | Tu           | 1859  | MANCHESTER EQUITABLE SOCIETY COM.—14TH CONGRESS,                                                          |
| 30            | W            | 1887  | 19th CONGRESS, CARLISLE. G. J. HOLYOAKE, Pres.                                                            |
| 31            | Th           | 1884  | <i>Leicester Works, second extension, Opened.</i> —1ST CON.,<br>[LONDON. T. HUGHES, M.P., President, 1869 |

# June.

## SUNRISE AND SUNSET.

1st Rises at ....3 51    Sets at ....8 4    15th Rises at....3 44    Sets at....8 16  
 8th    „    ....3 47    „    ....8 11    22nd    „    ....3 44    „    ....8 18  
 29th Rises at 3 47.    Sets at 8 18.

## RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises at 0 58 a.m.    Sets at 11 15 a.m.    15th Rises at 9 31 a.m.    Sets at morn.  
 8th    „    3 27 a.m.    „    6 51 p.m.    22nd    „    6 43 p.m.    „    2 45 a.m.  
 29th Rises at 11 47 p.m.    Sets at 10 7 a.m.

New Moon, 9th ..... 4 34 p.m.    Full Moon, 23rd ..... 9 8 p.m.  
 First Quarter, 17th ..... 6 49 a.m.    Last Quarter, 13th..... 0 53 p.m.

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.                                                              |
|---------------|--------------|-------|-------------------------------------------------------------------------------------------------------------|
| 1             | F            | 1879  | Prince Louis Napoleon killed                                                                                |
|               |              | 1868  | <i>Kilmallock Branch Opened</i>                                                                             |
| 2             | S            | 1873  | <i>Manchester Drapery Department Established.—Gen.</i><br>[Quar. Meet., Manchester.—16TH CON., DERBY, 1884, |
| 3             | S            |       | <b>First Sunday after Trinity</b> [SEDDLEY TAYLOR, Pres.                                                    |
| 4             | M            | 1833  | General Wolseley born                                                                                       |
| 5             | Tu           | 1723  | Adam Smith born                                                                                             |
| 6             | W            |       | <i>Copenhagen Branch Opened, 1881.—2ND CONGRESS,</i>                                                        |
| 7             | Th           |       | [MANCHESTER. W. MORRISON, M.P., Pres., 1870.—                                                               |
| 8             | F            |       | [13TH CONGRESS, LEEDS. EARL DERBY, Pres., 1881                                                              |
| 9             | S            |       | <i>Corpus Christi</i>                                                                                       |
| 10            | S            |       | <b>Second Sunday after Trinity</b>                                                                          |
| 11            | M            | 1866  | Money Panic                                                                                                 |
| 12            | Tu           | 1876  | Midland Federal Corn Mills—Laying Foundation Stone                                                          |
| 13            | W            | 1878  | Berlin Congress assembled [of premises                                                                      |
| 14            | Th           | 1886  | 18TH CONGRESS, PLYMOUTH. LORD MORLEY, President                                                             |
| 15            | F            | 1875  | <i>Manchester Drapery Warehouse, Dantzic Street,</i>                                                        |
| 16            | S            | 1854  | Industrial and Provident Societies Act [Opened                                                              |
| 17            | S            |       | <b>Third Sunday after Trinity</b>                                                                           |
| 18            | M            | 1876  | W. PARE, FIRST SECRETARY OF CONGRESS BOARD, died                                                            |
| 19            | Tu           | 1834  | Rev. C. H. Spurgeon born                                                                                    |
| 20            | W            | 1837  | Queen's Ascension [CONGRESS BOARD, died, 1884.                                                              |
| 21            | Th           |       | Longest Day.—Jos. SMITH, ASSISTANT SECRETARY                                                                |
| 22            | F            | 1842  | Income Tax imposed                                                                                          |
| 23            | S            | 1870  | <i>C. W. S. Quarter Day</i>                                                                                 |
| 24            | S            |       | <b>Fourth Sunday after Trinity</b>                                                                          |
| 25            | M            | 1884  | <i>Newcastle Drapery Warehouse Opened.</i>                                                                  |
| 26            | Tu           | 1830  | George IV. died.—Samuel Crompton died, 1827                                                                 |
| 27            | W            | 1840  | Paganini, violinist, died                                                                                   |
| 28            | Th           | 1838  | Queen Victoria crowned                                                                                      |
| 29            | F            | 1879  | Victoria University chartered                                                                               |
| 30            | S            | 1879  | <i>Goole Forwarding Depot Opened</i>                                                                        |



# July.

## SUNRISE AND SUNSET.

|                                   |                  |                     |                 |
|-----------------------------------|------------------|---------------------|-----------------|
| 1st Rises at....3 48              | Sets at.... 8 18 | 15th Rises at...4 2 | Sets at.... 8 9 |
| 8th „ ....3 55                    | „ .... 8 14      | 22nd „ ....4 10     | „ .... 8 2      |
| 29th Rises at 4 21. Sets at 7 50. |                  |                     |                 |

## RISING, SETTING, AND CHANGES OF THE MOON.

|                                             |                   |                         |                    |
|---------------------------------------------|-------------------|-------------------------|--------------------|
| 1st Rises at 0 7 a.m.                       | Sets at 0 21 p.m. | 15th Rises at 11 7 a.m. | Sets at 11 21 p.m. |
| 8th „ 3 16 a.m.                             | „ 3 37 p.m.       | 22nd „ 7 38 p.m.        | „ 3 4 a.m.         |
| 29th Rises at 10 51 p.m. Sets at 11 13 a.m. |                   |                         |                    |
| New Moon, 9th .....                         | 6 17 p.m.         | Full Moon, 23rd.....    | 5 45 a.m.          |
| First Quarter, 16th.....                    | 0 13 p.m.         | Last Quarter, 1st ..... | 3 53 a.m.          |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.          |
|---------------|--------------|-------|---------------------------------------------------------|
| 1             | S            |       | <b>Fifth Sunday after Trinity</b>                       |
| 2             | M            | 1867  | EQUITABLE CO-OP. BUILDING SOCIETY ESTABLISHED           |
| 3             | Tu           | 1886  | Battle of Sadowa —DUNDEE BRANCH OF                      |
| 4             | W            | 1776  | Independence Day, U.S.A. [SCOTTISH C. W. S. OPENED      |
| 5             | Th           |       | Various Licenses expire [1881                           |
| 6             | F            | 1535  | Sir Thomas More beheaded                                |
| 7             | S            | 1885  | Indian Parcel Post Inaugurated                          |
| 8             | S            |       | <b>Sixth Sunday after Trinity</b>                       |
| 9             | M            |       | Fire Insurances expire                                  |
| 10            | Tu           | 1835  | Hartlepool Tidal Harbour Opened                         |
| 11            | W            | 1874  | LANCASHIRE AND YORKSHIRE PROD. SOCIETY INSTITUTED       |
| 12            | Th           | 1869  | <i>Limerick Branch Opened</i>                           |
| 13            | F            | 1712  | Richard Cromwell died [day for receiving                |
| 14            | S            | 1873  | <i>Waterford Branch Opened.—Nomination Lists : Last</i> |
| 15            | S            |       | <b>Seventh Sunday after Trinity</b>                     |
| 16            | M            | 1876  | <i>Manchester Furnishing Department Opened</i>          |
| 17            | Tu           | 1845  | Earl Grey died                                          |
| 18            | W            | 1881  | Dean Stanley died                                       |
| 19            | Th           | 1873  | Bishop Wilberforce died                                 |
| 20            | F            | 1826  | Earl Derby born [New Furnishing Warehouse Opened        |
| 21            | S            | 1883  | S.S. “Marianne Briggs” Purchased.—Manchester            |
| 22            | S            |       | <b>Eighth Sunday after Trinity</b>                      |
| 23            | M            | 1833  | Marquis of Hartington born                              |
| 24            | Tu           | 1851  | Window Tax repealed                                     |
| 25            | W            | 1883  | Captain Webb drowned                                    |
| 26            | Th           | 1866  | Atlantic Cable laid                                     |
| 27            | F            | 1881  | <i>Purchase of s.s. “Cambrian”</i>                      |
| 28            | S            | 1874  | Liverpool Landing Stage burnt                           |
| 29            | S            |       | <b>Ninth Sunday after Trinity</b>                       |
| 30            | M            | 1870  | Franco-German War begun                                 |
| 31            | Tu           | 1872  | Edward Peace died                                       |

# August.

## SUNRISE AND SUNSET.

|                                  |                  |                      |                  |
|----------------------------------|------------------|----------------------|------------------|
| 1st Rises at....4 25             | Sets at.... 7 46 | 15th Rises at ..4 46 | Sets at.... 7 21 |
| 8th „ ....4 36                   | „ .... 7 34      | 22nd „ ..4 57        | „ .... 7 7       |
| 29th Rises at 5 8. Sets at 6 53. |                  |                      |                  |

## RISING, SETTING, AND CHANGES OF THE MOON.

|                                            |                   |                         |                    |
|--------------------------------------------|-------------------|-------------------------|--------------------|
| 1st Rises at morn.                         | Sets at 2 27 p.m. | 15th Rises at 2 10 p.m. | Sets at 11 19 p.m. |
| 8th „ 5 7 a.m.                             | „ 8 12 p.m.       | 22nd „ 7 52 p.m.        | „ 5 28 a.m.        |
| 29th Rises at 10 30 p.m. Sets at 1 16 p.m. |                   |                         |                    |

|                           |           |                          |           |
|---------------------------|-----------|--------------------------|-----------|
| New Moon, 7th .....       | 6 21 a.m. | Full Moon, 21st .....    | 4 20 p.m. |
| First Quarter, 14th ..... | 4 44 p.m. | Last Quarter, 29th ..... | 2 18 p.m. |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.                           |
|---------------|--------------|-------|--------------------------------------------------------------------------|
| 1             | W            |       | <i>Lammas Day</i>                                                        |
| 2             | Th           | 1800  | Last Sitting of Irish Parliament                                         |
| 3             | F            | 1732  | Bank of England started                                                  |
| 4             | S            | 1873  | <i>Cheshire Branch Opened and Leicester Works</i>                        |
| 5             | S            |       | <b>Tenth Sunday after Trinity.</b> — <i>Leicester Works,</i>             |
| 6             | M            |       | Bank Holiday [ <i>first extension, Opened 1876</i> ]                     |
| 7             | Tu           |       | Length of Day, 15 hours 1 minute                                         |
| 8             | W            | 1827  | George Canning died                                                      |
| 9             | Th           | 1675  | Greenwich Observatory commenced                                          |
| 10            | F            | 1675  | Royal Observatory commenced                                              |
| 11            | S            | 1863  | <i>Co-operative Wholesale Society Enrolled</i>                           |
| 12            | S            |       | <b>Eleventh Sunday after Trinity</b>                                     |
| 13            | M            | 1870  | Admiral Farragut died                                                    |
| 14            | Tu           | 1880  | <i>Heckmondwike Boot and Shoe Works Commenced</i>                        |
| 15            | W            | 1771  | Sir Walter Scott born                                                    |
| 16            | Th           | 1873  | <i>C. W. S. Insurance Fund Established</i>                               |
| 17            | F            | 1786  | Frederick the Great died                                                 |
| 18            | S            | 1870  | Battle of Gravelotte                                                     |
| 19            | S            | 1823  | <b>Twelfth Sunday after Trinity</b>                                      |
| 20            | M            | 1868  | Abergele Railway Accident                                                |
| 21            | Tu           |       | <i>Voting Lists : Last day for receiving</i>                             |
| 22            | W            | 1800  | Rev. Dr. Pusey born                                                      |
| 23            | Th           | 1862  | CORNER STONE, BLACKLEY STORE, LAID                                       |
| 24            | F            | 1572  | Massacre of St. Bartholomew [ <i>Branch Quarterly Meet.</i> ]            |
| 25            | S            | 1886  | <i>Longton Crockery Depôt Opened.</i> —[ <i>Newcastle &amp; London</i> ] |
| 26            | S            |       | <b>Thirteenth Sunday after Trinity</b> — <i>ECCLES CENTRAL</i>           |
| 27            | M            | 1816  | Bombardment of Algiers [ <i>STORE INAUGURATED 1865</i> ]                 |
| 28            | Tu           | 1850  | Dover and Calais Cable laid                                              |
| 29            | W            | 1867  | Co-op. INSURANCE COMPANY REGISTERED                                      |
| 30            | Th           | 1856  | Sir John Ross, Arctic navigator, died                                    |
| 31            | F            | 1688  | John Bunyan died                                                         |



# September.

## SUNRISE AND SUNSET.

|                                     |                  |                       |                  |
|-------------------------------------|------------------|-----------------------|------------------|
| 1st Rises at....5 13                | Sets at.... 6 46 | 15th Rises at ..5 35  | Sets at.... 6 14 |
| 8th     "     ....5 25              | "     .... 6 29  | 22nd     "     ..5 46 | "     .... 5 58  |
| 29th Rises at 5 58.   Sets at 5 43. |                  |                       |                  |

## RISING, SETTING, AND CHANGES OF THE MOON.

|                                              |                  |                          |                 |
|----------------------------------------------|------------------|--------------------------|-----------------|
| 1st Rises at morn.                           | Sets at 4 9 p.m. | 15th Rises at 4 16 p.m.  | Sets at morn.   |
| 8th     "     7 58 a.m.                      | "     7 54 p.m.  | 22nd     "     7 17 p.m. | "     7 50 a.m. |
| 29th Rises at 11 21 p.m.   Sets at 2 50 p.m. |                  |                          |                 |

|                           |           |                         |           |
|---------------------------|-----------|-------------------------|-----------|
| New Moon, 6th .....       | 4 56 a.m. | Full Moon, 20th.....    | 5 24 a.m. |
| First Quarter, 12th ..... | 10 0 p.m. | Last Quarter, 28th..... | 8 30 a.m. |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.               |
|---------------|--------------|-------|--------------------------------------------------------------|
| 1             | S            | 1870  | <i>Gen. Quar. Meet. Man.</i> —HEBDEN B'GE MANU. SOC. STARTED |
| 2             | S            |       | <b>Fourteenth Sunday after Trinity</b> —" Co-OPERATIVE       |
| 3             | M            |       | [NEWS " FIRST ISSUED 1871                                    |
| 4             | Tu           | 1837  | Lord Ashburne died                                           |
| 5             | W            | 1838  | Grace Darling's Rescue                                       |
| 6             | Th           | 1715  | Rebellion in Scotland                                        |
| 7             | F            | 1709  | Dr. Johnson born                                             |
| 8             | S            | 1868  | SCOTTISH WHOLESALE COMMENCED BUSINESS                        |
| 9             | S            |       | <b>Fifteenth Sunday after Trinity</b>                        |
| 10            | M            | 1882  | Battle of Tel-el-Kebir                                       |
| 11            | Tu           | 1709  | Battle of Malplaquet                                         |
| 12            | W            | 1819  | Marshal Blucher died                                         |
| 13            | Th           | 1884  | LIFEBOAT " Co-OPERATOR No. 1 " presented to R. N. L. I.      |
| 14            | F            | 1852  | Duke of Wellington died                                      |
| 15            | S            | 1873  | <i>Leicester Works Commenced</i>                             |
| 16            | S            |       | <b>Sixteenth Sunday after Trinity</b>                        |
| 17            | M            | 1863  | PAISLEY MANUFACTURING SOCIETY STARTED                        |
| 18            | Tu           | 1797  | General Hoche died                                           |
| 19            | W            |       | PAISLEY ROAD PREMISES, SCOTTISH C. W. S., OPENED             |
| 20            | Th           | 1884  | <i>21st Anniversary of C. W. S., Commemoration of</i>        |
| 21            | F            | 1832  | Sir Walter Scott died                                        |
| 22            | S            | 1854  | <i>C. W. S. Quarter Day</i>                                  |
| 23            | S            |       | <b>Seventeenth Sunday after Trinity</b>                      |
| 24            | M            | 1882  | Cetewayo arrived at Cape Town                                |
| 25            | Tu           | 1870  | Siege of Paris commenced                                     |
| 26            | W            | 1857  | Lucknow relieved. [Hooper Square                             |
| 27            | Th           | 1880  | <i>London Drapery Dept. Commenced in new premises,</i>       |
| 28            | F            | 1872  | HECKMONDWIKE CENTRAL STORE INAUGURATED                       |
| 29            | S            |       | { <i>Michaelmas Day.—Bristol Depot Com., 1884.—EDIN-</i>     |
| 30            | S            |       | { [BURGH Co-OP. PRINTING Co. COMMENCED, 1873                 |
|               |              |       | <b>Eighteenth Sunday after Trinity</b>                       |

# October.

## SUNRISE AND SUNSET.

1st Rises at ....6 1 Sets at.... 5 40 | 15th Rises at ..6 25 Sets at.... 5 6  
 8th ,, ....6 14 ,, .... 5 22 | 22nd ,, ..6 36 ,, .... 4 52  
 29th Rises at 6 50. Sets at 4 37.

## RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises at 0 25 a.m. Sets at 4 8 p.m. | 15th Rises at 4 0 p.m. Sets at 1 2 a.m.  
 8th ,, 9 43 a.m. ,, 7 17 p.m. | 22nd ,, 6 29 p.m. ,, 8 55 a.m.  
 29th Rises at morn. Sets at 2 37 p.m.

New Moon, 5th ..... 2 34 p.m. | Full Moon, 19th ..... 9 8 p.m.  
 First Quarter, 12th..... 5 29 a.m. | Last Quarter, 28th..... 1 55 a.m.

| Day of Month | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.                |
|--------------|--------------|-------|---------------------------------------------------------------|
| 1            | M            | 1873  | Sir Edwin Landseer died                                       |
| 2            | Tu           | 1786  | Admiral Keppel died                                           |
| 3            | W            | 1883  | Burnham Beeches made public                                   |
| 4            | Th           | 1787  | Guizot born                                                   |
| 5            | F            | 1874  | <i>Durham Soap Works Commenced</i>                            |
| 6            | S            | 1884  | <i>S.S. "Progress" Launched</i>                               |
| 7            | S            |       | <b>Pineteenth Sunday after Trinity</b>                        |
| 8            | M            | 1871  | Chicago burnt                                                 |
| 9            | Tu           | 1759  | Eddystone Lighthouse finished                                 |
| 10           | W            | 1885  | "Hell Gate" dynamited                                         |
| 11           | Th           | 1492  | America discovered by Columbus                                |
| 12           | F            | 1886  | <i>S.S. "Federation" Launched</i>                             |
| 13           | S            |       | <i>Nomination Lists: Last day for receiving</i>               |
| 14           | S            |       | <b>Twentieth Sunday after Trinity.</b> — <i>C. W. S. Bank</i> |
| 15           | M            |       | <i>[Department Commenced, 1872]</i>                           |
| 16           | Tu           | 1834  | Houses of Parliament burnt                                    |
| 17           | W            | 1874  | First Hospital Saturday                                       |
| 18           | Th           | 1826  | Last English lottery                                          |
| 19           | F            | 1745  | Dean Swift died                                               |
| 20           | S            | 1823  | Thomas Hughes born                                            |
| 21           | S            |       | <b>Twenty-first Sunday after Trinity</b>                      |
| 22           | M            | 1707  | First British Parliament opened                               |
| 23           | Tu           | 1821  | Wallsend Colliery Explosion                                   |
| 24           | W            | 1852  | D. Webster died                                               |
| 25           | Th           | 1415  | Battle of Agincourt                                           |
| 26           | F            | 1859  | "Royal Charter" lost                                          |
| 27           | S            | 1818  | Earl of Idlesleigh (Sir Stafford Northcote) born              |
| 28           | S            |       | <b>Twenty-second Sunday after Trinity</b>                     |
| 29           | M            | 1831  | Bristol riots                                                 |
| 30           | Tu           | 1751  | Sheridan born                                                 |
| 31           | W            | 1882  | <i>Leeds Saleroom Opened</i>                                  |



# November.

## SUNRISE AND SUNSET.

|                                   |                  |                        |                 |
|-----------------------------------|------------------|------------------------|-----------------|
| 1st Rises at ....6 56             | Sets at ....4 32 | 15th Rises at....7 19  | Sets at....4 11 |
| 8th     ,,     ....7 7            | ,,     ....4 22  | 22nd   ,,     ....7 31 | ,,     ....4 3  |
| 29th Rises at 7 42. Sets at 3 55. |                  |                        |                 |

## RIISING, SETTING, AND CHANGES OF THE MOON.

|                                           |                   |                          |                   |
|-------------------------------------------|-------------------|--------------------------|-------------------|
| 1st Rises at 3 1 a.m.                     | Sets at 3 54 p.m. | 15th Rises at 3 29 p.m.  | Sets at 3 28 a.m. |
| 8th     ,,     0 13 p.m.                  | ,,     8 29 p.m.  | 22nd   ,,     7 2 p.m.   | ,,     10 44 a.m. |
| 29th Rises at 1 53 a.m. Sets at 2 19 p.m. |                   |                          |                   |
| New Moon, 4th .....                       | 0 2 a.m.          | Full Moon, 18th .....    | 3 15 p.m.         |
| First Quarter, 10th .....                 | 4 15 p.m.         | Last Quarter, 26th ..... | 5 20 p.m.         |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.            |
|---------------|--------------|-------|-----------------------------------------------------------|
| 1             | Th           | 1882  | <i>Tea and Coffee Department, London, Commenced</i>       |
| 2             | F            | 1887  | <i>London Branch New Warehouse Opened.—Manufacture</i>    |
| 3             | S            | 1867  | <i>Bread Riots at Exeter [of Cocoa and Chocolate Com.</i> |
| 4             | S            |       | <b>Twenty-third Sunday after Trinity</b>                  |
| 5             | M            | 1861  | HALIFAX INDUSTRIAL SOCIETY INAUGURATED                    |
| 6             | Tu           | 1869  | Blackfriars New Bridge opened                             |
| 7             | W            | 1801  | R. D. Owen, Reformer, born                                |
| 8             | Th           | 1886  | <i>Trial Trip s.s. "Federation"</i>                       |
| 9             | F            | 1841  | Prince of Wales born                                      |
| 10            | S            | 1483  | Luther born [Ship Canal, first sod cut, 1887              |
| 11            | S            |       | <b>Twenty-fourth Sunday after Trinity.—Manchester</b>     |
| 12            | M            | 1854  | Charles Kemble died                                       |
| 13            | Tu           | 1851  | Telegraph between England and France opened               |
| 14            | W            | 1844  | Abercrombie, metaphysician, died                          |
| 15            | Th           | 1708  | Pitt, statesman, born                                     |
| 16            | F            | 1811  | John Bright born                                          |
| 17            | S            | 1858  | Robert Owen died                                          |
| 18            | S            |       | <b>Twenty-fifth Sunday after Trinity</b>                  |
| 19            | M            | 1815  | Peace proclaimed                                          |
| 20            | Tu           |       | <i>Voting Lists: Last day for receiving</i>               |
| 21            | W            | 1835  | The "Ettrick Shepherd" died                               |
| 22            | Th           | 1804  | Rochdale Canal opened                                     |
| 23            | F            | 1641  | Irish Rebellion                                           |
| 24            | S            |       | <i>Newcastle and London Branch Quarterly Meetings</i>     |
| 25            | S            |       | <b>Twenty-sixth Sunday after Trinity</b>                  |
| 26            | M            | 1871  | <i>Opening of Newcastle-on-Tyne Branch</i>                |
| 27            | Tu           | 1812  | Lord Selborne born                                        |
| 28            | W            | 1814  | <i>Times printed by steam</i>                             |
| 29            | Th           | 1872  | Horace Greely died                                        |
| 30            | F            |       | <i>St. Andrew's Day</i>                                   |

December.

## SUNRISE AND SUNSET.

|                                  |                 |                     |                |
|----------------------------------|-----------------|---------------------|----------------|
| 1st Rises at ...7 46             | Sets at ...3 53 | 15th Rises at...8 2 | Sets at...3 49 |
| 8th „ ....7 54                   | „ ....3 50      | 22nd „ ....8 6      | „ ....3 51     |
| 29th Rises at 8 8. Sets at 3 56. |                 |                     |                |

### RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises at 4 37 a.m. Sets at 3 8 p.m. | 15th Rises at 2 37 p.m. Sets at 4 36 a.m.  
 8th „ 0 10 p.m. „ 9 48 p.m. | 22nd „ 7 59 p.m. „ 10 44 a.m.  
 29th Rises at 3 32 a.m. Sets at 1 35 p.m.

|                           |           |                          |            |
|---------------------------|-----------|--------------------------|------------|
| New Moon, 3rd .....       | 10 5 a.m. | Full Moon, 18th .....    | 10 40 a.m. |
| First Quarter, 10th ..... | 6 45 a.m. | Last Quarter, 26th ..... | 5 59 a.m.  |

| Day of Month. | Day of Week. | Year. | REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &c.        |
|---------------|--------------|-------|-------------------------------------------------------|
| 1             | S            |       | <i>General Quarterly Meeting, Manchester</i>          |
| 2             | S            |       | <b>First Sunday in Advent</b>                         |
| 3             | M            | 1820  | Lord Chief Justice Coleridge born                     |
| 4             | Tu           | 1795  | Thomas Carlyle born                                   |
| 5             | W            | 1870  | Rome made Italian capital                             |
| 6             | Th           | 1882  | Trollope, novelist, died                              |
| 7             | F            | 1815  | Marshal Ney shot                                      |
| 8             | S            | 1542  | Mary Queen of Scots beheaded                          |
| 9             | S            |       | <b>Second Sunday in Advent</b>                        |
| 10            | M            | 1768  | Royal Academy instituted                              |
| 11            | Tu           | 1805  | Archdeacon Denison born                               |
| 12            | W            | 1883  | Vice-Chancellor Hall died                             |
| 13            | Th           | 1884  | Attempt to blow up London Bridge                      |
| 14            | F            | 1861  | Prince Consort died.—Princess Alice died, 1878        |
| 15            | S            | 1683  | Izaak Walton died                                     |
| 16            | S            |       | <b>Third Sunday in Advent</b>                         |
| 17            | M            | 1770  | Beethoven born                                        |
| 18            | Tu           |       | Length of day 7h. 46min.                              |
| 19            | W            | 1805  | Lord Beaconsfield born                                |
| 20            | Th           | 1848  | Napoleon elected President [OPENED, 1844              |
| 21            | F            |       | Shortest Day.—ROCHDALE PIONEERS' FIRST STORE          |
| 22            | S            |       | <i>C. W. S. Quarter Day</i>                           |
| 23            | S            |       | <b>Fourth Sunday in Advent</b>                        |
| 24            | M            | 1863  | W. M. Thackeray died                                  |
| 25            | Tu           |       | <b>Christmas Day.</b> —OLDHAM INDUS. SOCY. COM., 1850 |
| 26            | W            |       | Boxing Day.—Bank Holiday                              |
| 27            | Th           | 1834  | Charles Lamb died                                     |
| 28            | F            | 1859  | Lord Macaulay died                                    |
| 29            | S            | 1809  | Right Hon. W. E. Gladstone born                       |
| 30            | S            |       | <b>First Sunday after Christmas.</b> —C. W. S. Fire,  |
| 31            | M            | 1882  | Gambetta, statesman, died [London Branch, 1885        |





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